



**INDIAN AGRICULTURAL
RESEARCH INSTITUTE, NEW DELHI**

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INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1 42201	acres.
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (1; heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 ore) (Denmark, Norway, Sweden)	=	15.1 /6d.	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64d.	at par
1 Franc (100 centimes) (France)	=	933/64d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	' yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	953/64d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933/64d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64d.	at par
1 litre	=	0.21998	gallons
1 Mark (100 Pfennige) (Germany)	=	0.0275	bushels
1 Mark (100 penni) (Finland)	=	11 3/4d.	at par
1 Metre	=	9 33/64d.	at par
1 Milreis, gold (Brazil)	=	3.28084	lecl
1 Milreis, gold (Portugal)	=	25. 261/64d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	48 519/64d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	9 33/64d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	35 1137/64d.	at par
1 Pund (Sweden)	=	185.015/64d.	at par
1 Quintal	=	0.93712	lbs.
1 Rouble, gold (100 kopeks) (Russia)	=	1.96843	cwts.
1 Rupee, silver (16 annas) (British India)	=	25.1 3/4d.	at par
1 Talari (20 piastre) (Egypt)	=	15. 6d.	at par
1 Verst (Russia)	=	45.1 1/32d.	at par
1 Yen, gold (2 fun or 100 sen) (Japan)	=	1166.64479	yards
1 Zentner (Germany)	=	25.037/64d.	at par
	=	110 23171	lbs.

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INTERNATIONAL REVIEW
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OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

CANADA.

THE CO-OPERATIVE MARKETING OF LIVE STOCK.

OFFICIAL SOURCE :

REPORTS OF THE PROVINCIAL DEPARTMENTS OF AGRICULTURE in *The Agricultural Gazette of Canada*, Ottawa, July, 1918.

OTHER SOURCES :

LLOYD (F. A.) : "How Western Live Stock goes to Market", in *Farm and Dairy*, Toronto, 14 August 1919.
ABELL (P. M.) : "Co-operative Live Stock Shipping", in *The Grain Growers' Guide*, Winnipeg, 22 October 1919.

More than seven thousand carloads of live stock were sold co-operatively by farmers of five Canadian provinces in 1918, and this system of selling has not yet passed its initial stage.

Progress has been made especially in the Prairie provinces. Local associations for the consignment of live stock are found everywhere from Winnipeg to the Rocky Mountains. A considerable number of these societies are affiliated to the Grain Growers, but in Saskatchewan the live stock marketing societies incorporated under the Agricultural Associations Act do business on a large scale. In Ontario there are from 200 to 250 of these organizations. Many of them originated as farmers' clubs; others were founded under the auspices of the Farmers' Union. In Quebec province the Cheesemakers' Association sells all kinds of animal produce while the breeders' societies only market animals for purposes of breeding. In the more eastern provinces co-operative marketing has dealt in particular with sheep and lambs. It is anticipated that a large quantity of Canadian live stock will before long be sold in this way by the farmers them-

selves, who will learn the methods and principles of marketing and will be influenced to improve their stock with a view to rendering it as profitable as possible.

The systems of co-operative marketing vary with provinces. We will briefly explain those followed in the provinces of Quebec, Ontario and Saskatchewan and in the Western Provinces.

§ I. QUEBEC PROVINCE.

In considering Quebec Province it is best to examine the marketing of sheep and that of cattle and pigs separately.

Eleven sheep breeders' and wool producers' co-operative associations have been organized in the province since 1917 and several of them sell sheep co-operatively. Such sales are by auction and take place on the county fair ground or in another conveniently central place, or else the sheep are consigned by carloads to the Montreal market. They are graded by weight in the presence of the farmers, and each farmer receives a certificate showing the grade of the animals he offers for sale. The association charges from 8 to 10 cents for each sheep sold. When consignments are made to the Montreal market from 1 ½ to 2 cents per pound is deducted from the price paid to the farmer in order to cover the selling agent's commission, freight, and depreciation through shrinkage of weight during transport.

The total value of the sheep sold by six of these associations in 1918 was \$36,544.87. The farmers received prices from 1 to 2 cents per pound higher than those paid by local buyers.

The sale of cattle and hogs in this province has been practically unorganized, live animals being bought at a fixed price by the great slaughterhouses of Montreal and by many rural dealers. However in 1918 the Quebec Cheesemakers' Agricultural Association began to sell live stock for its shareholders. It grades and sells for its members, by carloads only, such live animals as young steers, heifers, bulls, cows, lambs, sheep, hogs and calves. Its members consist both of individuals and of associations of various kinds. Consignments are made from the districts in which these associations are active or from the two slaughterhouses managed by the Quebec Cheesemakers' Co-operative Association. The animals are weighed and numbered at loading points, and a copy of the weigh-sheet is posted with the bill of lading to the Cheesemakers' Association. The marking of the animals makes the grading easier. The owner receives the amount due to him together with a grade certificate containing valuable information as to defects noted in his animals and the way to cure these.

A charge of 2 ½ per cent. is made on sales of live animals by carloads, in addition to expenses of consignment and the cost of food supplied in Montreal and of insurance.

During 1918 the Cheesemakers' Association received from its members about 125 carloads of live animals or 6,900 head of stock. Their sale produced a total sum of \$152,951.03.

THE CO-OPERATIVE MARKETING OF LIVE STOCK

§ 2. ONTARIO.

Co-operative marketing of live stock in Ontario is of recent origin. The oldest association having this object has not existed for more than five years and the movement has become important only within the last two years. There are now from 200 to 250 organizations which consign stock co-operatively, and in 1918 about 1,000 carloads, approximately valued at \$3,000,000, were despatched.

Some of these associations have been organized only for the purpose of marketing live stock ; others are co-operative organizations which have been in business for some time ; but the majority have originated as farmers' clubs of which there are from 600 to 800 in Ontario. A farmers' club appoints a committee, called the live stock committee, to take charge of the marketing. This committee arranges with one of its members or a local drover that he undertake the actual handling of the stock, receiving either a commission or a regular salary. In many cases such a " shipper " acts for from two to seven clubs, and " ships " stock from several stations on the same railway, so that full carloads are made up and clubs which do not contribute a full carload yet pay freight at the rates charged for such.

When stock is consigned by co-operative associations which have available capital, it is usually paid for on delivery at the car, and the profits on each consignment are distributed among the members *pro rata*. A reserve fund is used to cover any over-payments made to members at the time of delivery. But usually members wait for their returns until the stock is sold.

This co-operative marketing of live stock has led farmers in certain districts of the provinces to buy or build their own weighing scales at " shipping " stations, and has, wherever it has been carried on, caused an improvement in the quality of the stock marketed.

Among the organizations which have undertaken it the Live Stock Commission Department of the United Farmers' Co-operative Company, which has made sales on commission in Toronto market since 15 February 1918, deserves special notice. The following table summarizes its business from 15 February to 31 May 1918.

	Cattle		Hogs	Calves	Sheep	Value
15-28 February . .	33	460	782	—	178	78,919.52
1-31 March . . .	159	2,377	4,152	—	244	404,847.49
1-30 April . . .	250	3,451	6,288	869	271	656,712.31
1-31 May . . .	356	5,750	7,003	1,288	167	1,007,931.89
	798	12,033	18,225	2,157	860	2,148,411.21

The Provincial Department of Agriculture employs an official whose duty it is to assist such organizations in consigning stock, grading hogs, keeping records, etc. It has issued a circular which gives detailed instructions as to consigning stock, and has taken steps to acquaint farmers with demands on the market.

§ 3. SASKATCHEWAN.

In 1913 the Saskatchewan Department of Agriculture published a bulletin explaining the method of co-operative marketing and its benefits. As a result, some nine co-operative stock marketing associations were organized in the province in 1915. There are now 50 fully registered and incorporated active associations, in addition to the unincorporated local associations of the Saskatchewan Grain Growers' Association.

All these associations market stock in much the same way. Each of them has a manager, responsible for the details connected with the marketing, who usually receives a fixed rate of payment per hundred head marketed or a commission on the proceeds of a sale. Well established associations have fixed "shipping" days and each member delivers his stock at the local stockyards. Several associations in the province "ship" once a week regularly, others once a fortnight, others more frequently at one season of the year than others. All stock is weighed when it is delivered. Hogs are usually graded by weight and quality. Cattle and sheep are usually branded so that each consigner's animals may, when they are sold, be identified. The animals are sold through one of the live stock commission firms. The proceeds, less charges for freight, yardage, feeding and commission, are returned to the manager. In a business of this kind little or no capital is required.

To provide for accidents many associations have a local insurance fund, formed by deductions of 2 or 3 cents per \$100 from the proceeds of all marketing.

The following table gives the number of registered associations marketing stock and the quantity they sold from 1914 to 1918:

Year	Number of associations marketing live stock	Number of carloads sold	Value
1914	9	60	42,034.22
1915	10	140	150,512.76
1916	23	241	323,171.25
1917	35	546	1,050,265.18
1918	50	750	1,432,000.00

AGRICULTURAL CO-OPERATION IN IRELAND

Eleven associations which shipped 191 carloads of stock in 1917 claimed to have made a saving of \$36,382.

Several associations still make a practice of sending a new man to market each carload, shareholders frequently taking it in turns to accompany consignments. This practice will, if it is continued, seriously interfere with the success of the associations. The men who come with the stock often pay most attention to their own personal business, so that the stock is neglected in transit and sold to poor advantage.

The Co-operative Organization Branch of the Provincial Department of Agriculture is prepared to send an experienced man to assist the manager of a new association to handle his first consignment, that is to receive, weigh, grade and market it.

§ 4. WESTERN CANADA.

Local organizations called Live Stock Shipping Associations are found here and there from Winnipeg to the Rockies. They have managers who receive so many cents per hundredweight of the total weight of a consignment or about 1 per cent. of net returns. In 1918 the most important association, the United Grain Growers, handled 4,402 carloads of cattle through the medium of its three offices situated at Winnipeg, Calgary and Edmonton, respectively.

In some districts farmers go so far as to offer more for animals locally than conditions at the central market warrant, in the hope of discouraging members of the associations to such an extent that they cease to support these. It is indeed acknowledged that members 'in isolated cases possibly do not secure as much as they are bid locally for their live stock.'

To remedy this state of affairs it is recommended that there be government supervision of the various live stock markets of Canada.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN IRELAND IN 1917-18.

SOURCES:

REPORT OF THE IRISH AGRICULTURAL ORGANIZATION SOCIETY FOR THE YEAR ENDING 31st MARCH, 1918. I. A. W. S. Printing Department, Dublin, 1919.

THE ROSCREA BACON FACTORY, LTD. Statement of Accounts for Year ended 31st December 1917 and Directors' Report.

IDEM for Year ended 31st December 1918.

THE WYFORD MEAT SUPPLY AND LAMB FACTORY, Ltd. Auditor's Report, Statement of Accounts and Directors' Report for Year ended 31st December 1918

IRISH AGRICULTURAL WHOLESALE SOCIETY LIMITED Directors' Report of Balance Sheet at 31st December 1917

THE CO-OPERATIVE REFERENCE LIBRARY Statement communicated

BETTER BUSINESS Vol IV, Nos. 3 and 4 Dublin, May and August 1919

THE IRISH HOMESTEAD Vol XXVI, Nos. 9, 12, 13, 14, 22, 23 Dublin, 22 and 29 March, 3 April 31 May and 27 June 1919

In our issue for March 1918 we noticed the development of agricultural co-operation in Ireland, in 1916-17 (1), and we propose now to give the facts relating to the year which ended in March 1918. As before farmers' co-operation was centralized in the Irish Agricultural Organization Society whose report for the year 1917-18 is imperfect because it is based on returns furnished by only 677 societies the others having failed to supply the required data. Nevertheless the report is ample evidence of a successful year's work as is shown by the following figures which we reproduce.

TABLE I — *Position of the Societies Affiliated to the Irish Agricultural Organization Society in 1916 and 1917*

	1916	1917	Increase	Decrease
Total no. of affiliated societies	978	947		11
Total membership	106,734	113,640	6,896	
Total turnover	£6,090,540	£7,574,438	£1,474,578	
Average turnover per society	£4,700	£8,000	£3,300	
Average turnover per member	£57	£66	£9	
Affiliation fees	£1,465	£1,797	£328	
Subscriptions	£1,762	£2,921	£1,129	

The decrease in the number of affiliated societies is only apparent, being due to the fact that 53 agricultural banks which had long ceased to work were included in the figures for 1916. There is no doubt that the societies are becoming more numerous steadily increasing their business and becoming more loyal to the Irish Agricultural Organization Society. The increase of their trade is even more remarkable than our figures indicate because the average turnovers have been calculated not on the number of societies furnishing returns but on the total number registered. Calculated on the number of societies making returns, the average turnover

of a society in 1917 would be £9,661, an amount too large to be accounted for by the steady rise in the prices obtained for produce. Progress is also strikingly shown by the new branches of business which societies have undertaken.

Turning to the several kinds of society affiliated to the Irish Agricultural Organization Society, we reproduce figures giving a comparative view of their position on 31 March 1917 and on 31 March 1918:

TABLE II — *The Several Classes of Society.*

	31 March 1917	31 March 1917 to 31 March 1918		31 March 1918
	Total No.	No formed	No dissolved	Total No.
Creameries	349	7	10	341
Auxiliary creameries	95	—	—	95
Agricultural societies	218	36	14	270
Poultry societies	12	—	—	12
Industrial societies	9	—	—	9
Flax societies	6	10	—	16
Miscellaneous societies	32	9	2	39
Credit societies	224	—	53	171
Federations	2	—	—	2
Totals	977	62	79	906

§ I. PRODUCTION AND DISTRIBUTION.

The productive and distributive co-operative societies had a record of almost unvaried progress in 1917-18.

A. *Creameries.* — These maintain their lead among Irish co-operative societies. The decrease in their number in 1917-18 shown in Table II is only nominal, some of the ten societies said to have dissolved having amalgamated with others.

The exporting of milch cows, the shortage of feeding-stuffs, the diversion of more milk to towns, the increased home buttermaking and the increased cost and the scarcity of labour caused a decrease of about 9,000,000 gallons in the creameries' supply of milk. The committee of the Irish Agricultural Organization Society has approached the Department of Agriculture in order to obtain an enquiry into this matter. Side by side with the decrease in the supply of milk a large extension of the cheese-making enterprise of the creameries took place. The natural result was

that the production of butter lessened by 2,000 tons. Its money value increased however by more than half a million pounds sterling, and this fact, together with the prices obtained for cheese, brought the turnover of the creameries up to £5,239,879 as against £4,512,893 in 1916.

As regards the quality of produce, the Butter Control Scheme worked well in the case of the creameries which followed its conditions closely and paid due attention to the efficiency of processes and to cleanliness. At the so-called "pooling" stations butter was graded, with the result that the necessity became apparent of producing only the finest quality of butter, and consequently of pasteurizing the cream and of possessing cooling and chilling plant. Analogous pooling stations were established for cheese. Attention was drawn at the meeting last March of the I. A. O. S. to the unfair competition which the creamery societies have to suffer from private and uncontrolled milk producers and manufacturers of dairy produce, who often place cheap adulterated or inferior goods on the market, and it was resolved that the I. A. O. S. should take steps to bring before the competent authorities the unanimous opinion of the co-operative dairy societies that all dairy produce should be compelled to reach certain fixed standards of fat content.

Sixty-two creameries undertook milling, usually the crushing or grinding of foodstuffs but in some cases the production of flour or oatmeal, in 1917-18, while ten others registered in order to do so.

B. Agricultural Societies. — The aggregate memberships of the societies whose primary object is to supply the needs of farmers, increased by 5,522, reaching 31,200, while their total turnover increased by £210,470, reaching £691,943, or an average of £24 a member. The functions of the societies tend to increase: they run stores, own machinery which their members hire, and cure bacon, and nine of them have engaged in milling. It is probable that their further development will be yet more varied. A very flourishing example of a society of this type is the Lisburn Co-operative Society which caters for both townsmen and countrymen. During the half-year which ended on 6 January 1919 it acquired 145 members and lost five, reaching a total membership of 1,950. Its share capital increased by £6,161, so that it amounted to £35,457. Total sales were £50,886 as against £38,926 in the corresponding six months of 1917.

The figures in Table III (page 9) give some idea of the articles a society of this kind can supply and the use to which it can put its profits.

C. Poultry Societies. — These societies did not increase in number, but their aggregate turnover rose from £118,022 in 1916 to £164,688 in 1917. They have ceased to occupy themselves entirely with the purchase and sale of eggs, undertaking also other branches of farmers' business, in two cases bacon curing for local use. It has been found that some managers of poultry societies lack the skill and knowledge requisite for their post, in which they must buy, pack and sell poultry and eggs and be in touch with the general business of local dealers; and one society was able largely to increase its business and profits after it had almost doubled its manager's salary.

AGRICULTURAL CO-OPERATION IN IRELAND

TABLE III. — *The Lisburn Co-operative Society*
6 July 1918 — 6 January 1919.

Receipts from Sales		Expenditure and Allocations	
Grocery	20,032	Working expenses, interest, depreciation	48,194
Agricultural sales	7,103	Mutual Benefit Fund	82
Drapery and boots	5,630	Reserve Fund	00
Bread	1,229	Grants	20
Coal	1,532	Provident Fund	40
		Insurance reserve	80
		Special depreciation	190
		Relief Fund	4
		Surplus for Dividend	2,176
	50,886		50,886

D. *Flax Societies*. — In addition to the 16 flax societies existing on 31 March 1918, ten others were registered before March 1919. These societies have secured representation on the Flax Supplies Committee and the Flax Advisory Committee of the Department of Agriculture and certain grievances have in consequence been removed. Their work has however been made difficult by the poor crop of 1918, the scarcity of material, the high price and scarcity of labour, the obstacles in the way of erecting scutch mills, and the uncertainty which the war has introduced into the market.

E. *Miscellaneous Societies*. — Some half dozen of these are milling societies. By far the most important are the Roscrea Bacon Factory and the Wexford Meat Supply and Bacon Factory, as to which we have the following figures :

TABLE IV. — *The Roscrea and Wexford Bacon Factories*.

	Membership		Turnover		Net Profit	
	1917	1918	1917	1918	1917	1918
Roscrea Bacon Factory	3,885	—	£ 151,108	£ 154,621	£ 6,115	£ 192 (1)
Wexford Meat Supply and Bacon Factory	2,448	3,000	£ 140,000	£ 235,221	£ 3,030	£ 4,484

(1) This much diminished net profit seems to have been due to the fact that the price of bacon in 1918 was not so high in relation to the price of pigs as in 1917.

In addition to curing bacon, the Wexford Meat Supply and Bacon Factory slaughters cattle and sheep, supplying British and local markets with the meat, and carries on various subsidiary industries, but the remarkable increase in its turnover is largely accounted for by the development of its bacon-curing and sausage-making departments.

The co-operative fishing societies, for which the Aran Isles Fishing Society, described in detail in our issue for December 1917, affords a model, numbered 12 in 1918 and had 481 members and a share capital of £1,054. Their sales of fish totalled £25,387; their working expenses were £2,805; their disposable surplus was £1,669. They paid a cash bonus to members of £847. Their reserve funds amounted to £1,015.

F. Federations. — Two trading federations of co-operative societies exist in Ireland. The especial distinction of the Irish Co-operative Agency Society, founded in 1893, is that it has secured for the creameries an outlet for their produce onto the principal butter-markets of England and Scotland. In recent years, in contradistinction to the state of affairs in 1913 and 1914 (1), this society's business has increased rapidly. Its turnover in 1917 was £454,207 and progress continued during 1918.

The Irish Agricultural Wholesale Society completed its twenty-first year of business in 1918. The following figures are interesting as showing the progress it made during the years of war:

	1916	1917	1918
No. of societies federated.	264	334	379
Paid-up ordinary capital	£7 139	£11,176	£14,460
Preference capital	£8 680	£10,140	£11,515
Ordinary capital paid up per society	£27	£33	£38
No. of ordinary shares held.	36,951	48,836	57,556
Average amount paid up per share.	3s. 10d.	4s. 7d.	5s.
Amount of sales	£479 876	£651,566	£914 242
Profits	£4,989	£5,576	£7,527
Reserve fund	£8,000	£2,500	£5,000

The apparent decrease in the reserve fund in 1917 was due to the writing off of the value of premises and plant in that year. The increase in the amount of sales betokens an increase of volume of trade as well as of money value, and has affected every one of the society's departments. Working expenses were £21,616 or 3.31 per cent. of sales in 1917 and £30,007 or 3.28 per cent. of sales in 1918.

(1) See our issue for July 1915, page 45

§ 2. CREDIT.

The number of the credit societies which furnished returns and are therefore known to have been active was 108 in 1916 and 102 in 1917. They did much the same amount of business in both these years, lending £41,281 in 1916 and £41,993 in 1917. Nor did the Central Credit Society increase its business. On 31 March 1918 only four loans, aggregating £365, were due to it. Its share capital amounted to £82 and its deposits to £273, and its profit was estimated as £11 16s.

There is some difficulty in accounting for this stagnant condition of co-operative credit, on which we have already commented (1), for it is said that the small farmer has found that the increased prices of the war years have in most cases been balanced by increased cost of production, so that his need for agricultural credit has not lessened. But a spirit of uncertainty and caution, if not of actual suspicion, seems to have affected the rural mind in Ireland during the war, and to have led both to a lessened demand for credit and to a reduction of deposits. Where capital was not forthcoming, the committees usually exercised their wonted caution and did nothing to increase the work of the societies. A second cause of slack business is the fact that credit is still insufficiently understood in Ireland to be not merely a boon to the needy but also an expedient for the expansion of farming. In the third place the withdrawal of the government loans to the banks was in some cases misinterpreted as a vote of no confidence in them.

There is also evidence that business might be increased if larger loans were granted. The average loan of 1917 was under £9, and this sum was probably too small in view of present prices. The maximum loan is now £50; and, all due precautions being taken as to security, it might possibly be raised with advantage.

§ 3. INSURANCE.

The work of the Co-operative Insurance Society in 1917 was handicapped by various restrictions and by shortage of staff. Insurance, under the Workmen's Compensation Insurance Scheme, of societies employing labour in flax scutch mills was however initiated, as was a scheme for personal insurance against accidents and various diseases which is designed to include farmers and especially to attract creamery managers.

Under the scheme for insurance against war and marine risks, described in our issue for July 1916, a total export valued at £296,842 was insured between April 1915 and 31 October 1918. The value insured up to 31 March 1918 was £204,617, and a subsequent decline was due to

(1) See our issue for March 1918, page 207.

the stoppage of the export of butter. But for this restriction, the insured value would probably have been close on half a million.

§ 4. THE CENTRAL ORGANIZATION.

The income and expenditure account of the Irish Agricultural Organization Society shows that its *financial position* is still far from satis-
factory.

In 1917-18 its expenditure amounted to £13,656 while its income, derived from affiliation fees, special subscriptions, members' subscriptions and donations and a few minor sources, fell short of this sum by £5,634. The deficiency was made up to the extent of £5,400 by the Treasury grant. This state of affairs is due to the defective support which the central society still obtains from its adherent societies, and to remedy which the general meeting in 1917 called upon these societies to contribute $\frac{1}{2}$ d. in the pound from their turnover (1). The general meeting of March 1919 went further in that it amended the rules of the I. A. O. S. so as to make it compulsory for all societies subsequently registered "to contribute an inclusive annual payment to the I. A. O. S. equivalent to a minimum of $\frac{1}{2}$ d. in the £ on their turnover up to £5,000; $\frac{1}{4}$ d. in the £ on all turnover in excess of that amount but not exceeding £10,000; and one eighth of a penny on the £ on all turnover in excess of £10,000", the minimum payment by any society being fixed at £5. It was also provided that the preliminary affiliation fee of a central creamery or a milling society should henceforth be £10 and that of any other society £5. It is hoped that these reforms will do away with the present dependence on the Treasury grant, which involves, as we explained last year (2), a certain government control. An attempt to eliminate this control also took shape in a resolution "that this meeting demands the withdrawal of the restrictions imposed by the Development Commissioners, or by the government for which they acted, upon the organizing operations of the society with regard to co-operative stores, and that the I. A. O. S. be accorded the same liberty in its work as has been accorded to the kindred organizations in England and Scotland."

Throughout 1917-18 the central society pursued its organizing functions. An important part of its work is its inspection of adherent societies and *auditing* of their accounts. In 1917 it audited the accounts of 429 societies, as against 414 in 1916, and its accountancy inspectors visited 173.

It continued its educational work largely by means of the *Co-operative Reference Library*, which was opened in 1914 to supply a need for a central office to which workers and students might apply for information as to methods of overcoming the various difficulties encountered by the Irish co-operative movement. This library collects information as to how foreign organizations have dealt with similar difficulties; and beyond collecting

1 See our issue for March 1918, page 207. (2) Ibid. page 206.

such data and all the principal publications on co-operation, it itself publishes information on co-operative and economic questions.

It has received two grants of £2,000 each from the Carnegie United Kingdom Trustees. It is housed in Dublin at Plunkett House, the headquarters of the Irish Agricultural Organization Society.

The work of the library has been hindered but not arrested by the war. In July 1914 and throughout the subsequent year it issued its "Monthly Bulletin" which contained articles on co-operative and social subjects. This paper was superseded in the autumn of 1915 by a quarterly, "Better Business", which has since been published regularly and in which valuable articles on co-operation and on economics in general have appeared. Besides these periodicals the library in September 1914 published a pamphlet on "Ireland's Food in War Time".

Beyond acting as a reference library, properly so called, and as a publishing office, the Co-operative Reference Library discharges functions as an information bureau, answering the queries of its members. Every member pays an annual subscription of £1 is. a year, in return for which he has the right to use the library, receives a copy of each of its publications, and is entitled to consult the staff on matters connected with economics and co-operation. A fee, proportionate to the labour necessitated and the expense, is charged for answering members' questions if this duty involves special research but not in any other case.

Registered co-operative societies may join the library on the same terms as individuals, and their members may read in it and may, through their secretaries, obtain information on special points from its staff. Clubs of various kinds may also join it by paying a subscription proportionate to their membership.

In addition to the publications mentioned, the Irish Agricultural Organization Society in 1917-18 continued the issue of its weekly paper, "The Irish Homestead", and issued pamphlets on "Industrial Alcohol" and "The Dublin Milk Supply". It prepared and revised various leaflets, and it circularized farmers on the committees of co-operative societies on such subjects as trade credit, the production and preservation of food, and the milk supply of towns.

Finally the society sought to *influence government authorities* in that the committee granted the secretary authority to act on the Food Control Committee for Ireland, the Irish War Aims Committee, the Irish Reconstruction Association, the Central Agricultural Advisory Council and the Dublin Selection Committee of the Ministry of Labour.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES

ALGERIA.

INSTITUTION OF COMPULSORY SYNDICATES FOR PROTECTION AGAINST
LOCUSTS IN ALGERIA — *Journal Officiel de la République Française*, 28 Sep-
tember 1919.

A law of 25 September 1918 has ruled that the prefects of the three departments of Algeria shall henceforth be able to determine by special decrees, which will be submitted to the governor general for approval, the procedure for destroying locusts in Algeria and the time at which this destruction should take place.

The measures dictated by these decrees will be carried out in each commune by a syndicate in which all the cultivators of the soil will be compulsorily included. They will be applicable on all the cultivated and uncultivated land of the commune which is not built upon, including lands of the State, the department, the communes and public and private establishments.

At the end of the campaign each commune will make a note of its expenditure which it will send, with relevant evidence, to the prefect, who will verify the note and then immediately remit it to the governor general. The expenditure will be borne by the budget of Algeria.

In case the measures ordered are not taken within the prescribed interval of time, the prefect will take steps, *ex officio*, for the execution of the decree. The expenditure will in this case be charged to the members of the defaulting syndicate, and will be distributed among them in proportion to the tax on the profits of the farm on account of which it has been incurred.

CANADA.

THE DEVELOPMENT OF CO-OPERATIVE ELEVATORS IN SASKATCHEWAN. —
The Agricultural Gazette of Canada, Ottawa, August 1919.

The Saskatchewan Co-operative Elevator Company had the following origin. In response to representations made to the provincial government a royal commission was appointed in 1910 to enquire into matters affecting the grain trade and to advise the government in this connection. After a thorough investigation the commission reported unanimously in

favour of special legislation providing a farmers' co-operative grain handling organization, to be assisted by a government loan but to be controlled by a managing body elected by the shareholders. The commission recommended that capital should be provided by the farmers in the districts which would be served by the required elevators, these farmers subscribing for stock up to the amount of the cost of the proposed elevators and paying 15 per cent. of the subscribed capital in cash. It was also recommended that the total area which the shareholders had under crop should be not less than 2,000 acres for each 10,000 bushel capacity of a proposed elevator, as this would ensure that it would be possible to run the elevator profitably. If these conditions were fulfilled the government would advance the 85 per cent. of the subscribed capital still unpaid, this loan to be repayable in 20 annual instalments and to bear interest at the rate of 5 per cent. per annum.

An Act embodying the recommendations of the commission was passed in the spring of 1911 and the executive of the Grain Growers' Association undertook the preliminary work of organization. The following table shows the growth of the enterprise and its business down to the close of 1917-18.

	Number of shareholders	Number of elevators	Number of bushels of wheat stored	Number of bushels of wheat sold
1911-12	2,597	46	3,261,000	
1912-13	8,962	137	12,899,030	12,761,686
1913-14	13,156	192	19,465,290	19,290,531
1914-15	14,742	210	13,764,653	13,612,807
1915-16	18,077	230	39,089,000	39,674,000
1916-17	19,317	258	32,359,725	33,518,836
1917-18	20,683	298	25,991,552	26,554,277

GERMANY.

1. THE "DEUTSCHER LANDBUND" — *Zeitschrift des deutschen Landwirtschaftsrats*, No. 8, Berlin, August 1919

The German Agricultural Federation (*Deutscher Landbund*) held in Berlin, on the 9th and 10th of July, a meeting of its general presidency at which were present representatives of the agricultural federations of Pomerania, Brandenburg, West Prussia, Silesia, Thuringen and Oldenburg, and of other free agricultural organizations of East Prussia, Hesse-Nassau, the Free State of Saxony, Wurtemberg, Mecklenburg and Brun-

swick. It was decided to supersede the name used hitherto, "Arbeitsgemeinschaft der deutschen Landwirtschaft" by "Deutscher Landbund" which more clearly expresses the essential character and aims of the organization.

The task of the German Agricultural Federation is the union of the present and eventual federations of single States and provinces, and of all cognate free agricultural organizations, in a free and strong institution having a politico-economic character and representing the interests of German agriculture.

* *

2. STATISTICS OF AGRICULTURAL CO-OPERATIVE SOCIETIES IN GERMANY
1 MARCH 1919 — *Sozialistische Monatshefte*, Nos 13-14, Berlin 10 June 1919, *International Co-operative Bulletin*, 12th year, Nos. 8 and 9, London, August-September 1919.

The increase in the number of agricultural co-operative societies during the years of war was as follows:

Year	Increase in number of societies
—	—
1915	290
1916	418
1917	464
1918	864

The net increase of the different kinds of society in 1918 was as follows: 428 savings and loan banks, 189 supply and sale societies and 260 societies of various kinds. A decrease of 13 was recorded in the number of co-operative dairies. The total net increase in 1918 was therefore 864.

Altogether the total number of co-operative agricultural societies in Germany in 1918 was 30,133 as against 29,268 in the previous year. Of these societies 19,837 or 65.8 per cent. were affiliated to the Imperial Union of German Agricultural Societies and consisted of 67 central societies, 11,993 savings societies and loan banks, 2,520 supply and sale societies, 2,253 dairies and 3,004 societies of various kinds.

In January 1919, 80 agricultural co-operative societies were founded; and in February 127, of which 60 were savings societies and loan banks, 11 supply and sale societies, 2 dairy societies, and 54 societies of various kinds. As against these new foundations there were 20 dissolutions, those of one loan bank, 6 dairy societies, one milk-selling society and 12 societies of various kinds. The net increase was therefore one of 107.

On 1 March 1919 the following societies were in existence: 94 central societies, 18,477 savings and loan banks, 3,205 supply and sale societies, 3,362 dairy societies, 211 milk selling societies, and 4,971 societies of various kinds, or a total number of 30,320 agricultural co-operative societies.

REGENCY OF TUNIS.

NATIVE THRIFT SOCIETIES IN 1918 (1). — *Comptes rendus des opérations des Sociétés indigènes de Prévoyance en 1918. Tunis 1918.*

Financial Position. — The receipts of the native thrift societies which increased their assets amounted in 1918 to the following sums:

(1) Recoveries on credits of former societies . . .	5,617.96	francs
(2) Recoveries on additional centimes of <i>medjba</i> tax	483.78	»
(3) Native thrift societies' quota of recoveries of temporary subscriptions	177,645.46	»
(4) Additional centimes of <i>canoun</i> tax on olive and date trees :		
(a) years before 1910 . . . 129.57	francs	} 121,579.47 »
(b) 1910 and later years. 121,449.90	»	
(5) Additional centimes of <i>achour</i> tax :		
(a) years before 1910 . . . 1,232.61	»	} 239,707.67 »
(g) 1910 and later years. 238,475.06	»	
(6) Additional centimes of Djerba land tax . .	9,340.69	»
(7) Additional centimes of <i>mradius</i>	3,015.79	»
(8) Recoveries on costs of management and commissions :		
(a) on loans of seed	173,331.19	»
(b) on mortgage loans	93,109.56	»
(c) on advances to co-operative societies. .	7,555.64	»
(9) State advance deducted from sum annually due by the Bank of Algeria.	207,476.15	»
Total . . .	1,038,863.36	»

Independently of receipts increasing assets, a sum of 2,510,956.90

(1) For the activity of these societies in 1917 see our issue for May 1919, page 254

frances was recovered in 1918 on the amount of loans. This sum was made up as follows.

1. Loans of seed	1908-1909	. . . . .	21,133.57	frances
2. —	1909-1910	. . . . .	5,383.79	"
3. —	1910-1911	. . . . .	33,631.65	"
4. —	1912-1913	. . . . .	80,206.92	"
5. —	1913-1914	. . . . .	40,028.80	"
6. —	1914-1915	. . . . .	561,189.02	"
7. —	1915-1916	. . . . .	303,695.30	"
8. —	1916-1917	. . . . .	27,661.37	"
9. —	1917-1918	. . . . .	466,916.76	"
10. Loans of maintenance	1908-1909	. . . . .	7,299.26	"
11. —	1910-1911	. . . . .	432.06	"
12. —	1912-1913	. . . . .	19,100.15	"
13. —	1913-1914	. . . . .	1,463.10	"
14. —	1914-1915	. . . . .	676,695.73	"
15. —	1916-1917	. . . . .	51,872.10	"
16. Mortgage loans	. . . . .		80,311.01	"
17. Advances to co-operative societies	. . . . .		133,936.31	"
Total . . .			2,501,956.90	"

Carried over from recoveries increasing the societies' assets 1,038,863.36 "

Grand total of recoveries of 1918 3,549,820.26 "

The recoveries which increased assets were the highest recorded since 1911.

Recoveries of loans amounted to less than in previous years. This was because the advances under this head were comparatively small, and because the sum still outstanding is every year less. This sum was as follows:

on 31 December 1915	. . . . .	6,733,054.46	frances
" 31 " 1916	. . . . .	5,431,862.01	"
" 31 " 1917	. . . . .	3,286,307.65	"
" 31 " 1918	. . . . .	3,126 517.05	"

Loans granted. — The loans of seed in 1918 were comparatively unimportant owing to the country's good economic position. Under this head the societies distributed only 5,459.50 quintals of superphosphate, 4,395.49 quintals of potatoes, 1,983.78 quintals of wheat and 3,535.78 quintals of barley; and under the head of maintenance loans 7,246 quintals of barley.

Under the head of mortgage loans a sum of only 121.65 francs, which represents the payment of some insurance premiums on various holdings in real estate was expended; but the giving of a new impulse to this part

of the societies' programme is being contemplated, and the question of whether there could be reduction in the costs of management and commissions, which now are 7 or 9 per cent. according to whether registered or other real estate is in case, is being studied.

Advances to co-operative societies amounted to 97,618.69 francs, a sum exceeded only in 1916.

Assets of societies on 31 December 1918. — From the receipts increasing assets which amounted to 1,038,863.36 francs
there must be deducted a sum of 4,257.96 "
which is the amount of loans of maintenance
written off as debts.

The receipts therefore amounted to the net sum of 1,034,205.41 "
to which must be added the amount of the societies' assets as shown by the last report, namely 6,759,627.69 "

The total on 31 December 1918 was therefore . 7,793,833.10 "

This sum is made up as follows :

1. Cash in hand	5,455,631.49	"
2. Loans of seed prior to 1918 still outstanding.	465,673.26	"
3. Outstanding loans of seed in 1917-18	73,031.50	"
4. Loans of maintenance prior to 1918 still outstanding.	165,920.35	"
5. Outstanding loans of maintenance in 1917-18	216,157.66	"
6. Mortgage loans	1,360,547.58	"
7. Advances to co-operative societies	827,635.76	"
8. Advances on loans of seed 1918-19	17,550.00	"

Total . . . 8,582,147.54 "

Thence must be deducted State advances made on various pretexts, amounting to 2,389,736.65 "

The net assets therefore amount to 6,192,410.89 "

SWITZERLAND.

FOUNDATION OF A CO-OPERATIVE VILLAGE. — *Genossenschaftliches Volks-Blatt* Basle, 23 May 1919, No. 11. *La Confédération*, Year XIV, No. 11, Basle, 22 May 1919.

There has for some time been talk in Basle of a co-operative land settlement society which would build, at the gates of the town, a co-operative village of which every inhabitant would have a cottage and a large garden. The inhabitants would also have facilities for founding all those co-operative institutions which serve to ameliorate living conditions. This idea

took form when 60,000 square metres of land in the territory of the neighbouring village of Muttznz were acquired. This land lies near the railway which will be prolonged to reach the proposed village.

The first meeting has already been held and will be followed by others. The enterprise will soon be in full train.

The new co-operative society will build on the land it has acquired from 150 to 180 houses, each intended for one family and each having for a garden at least 200 square metres of land. It will be permissible to sell these houses but not the land which will remain the property of the society. The purchaser of a house must pay at least 5 per cent. of its cost price, and it may not be resold except to the society and for the cost price. Speculation is entirely excluded. Every member of the society must buy a partnership share of 100 francs, which he may pay for by instalments. The Swiss Union of Consumers' Societies will advance the necessary funds. It is hoped that the village may be ready as early as 1920.

UNITED STATES.

NEW LAW ON CO-OPERATIVE ASSOCIATIONS IN MISSOURI — *Monthly Bulletin of the Missouri State Board of Agriculture*, No. 8, Jefferson City, August 1919

In its session of 1919, the Missouri State Legislature passed an Act "to provide for and authorize the incorporation of agricultural or mercantile co-operative associations."

Under this Act any twelve or more persons may form a co-operative association. The fee for incorporation is \$50 for the first \$50,000 dollars of capital stock and \$5 for each additional \$10,000 dollars of capital stock. No shareholder can hold shares of a greater aggregate par value than 10 per cent. of the total par value of all the shares of the association.

The profits must be distributed as follows: (1) ten per cent. of the net profits shall be set aside for a reserve fund, until an amount has been accumulated equal to 50 per cent. of the paid-up capital; (2) a dividend not exceeding 10 per cent. shall be declared on the paid-up capital, and (3) the remainder shall be divided by a uniform dividend determined by and based upon the amount of sales or purchases of shareholders and (at the option of the shareholders) upon the sales or purchases of non-shareholders who have done business with the association. If the association is both a selling and a productive company, the dividends may be determined by and based upon both raw material delivered and goods purchased by clients.

No corporation or association formed after the Act came into force will be allowed to use the word "co-operative" as part of its title, unless it has complied with the provisions of the Act.

Part II: Insurance and Thrift

AUSTRIA.

THE DEVELOPMENT OF THE LIVE STOCK INSURANCE INSTITUTE OF LOWER AUSTRIA (CATTLE SECTION) FROM 1914 to 1918

by HERMANN KALLBRUNNER, Agricultural Engineer.

When the war broke out in August 1914 this Provincial Live Stock Insurance Institute (*Landes-Viehversicherungs-Anstalt*) was, as we have already stated in our issue for March 1915 (1), slowly but steadily expanding and gathering strength. On 30 September 1913, the closing day of the last business-year of times of peace, about 25 per cent. of the cattle of the province were insured by the Institute (exactly 152,081 head as against 146,601 on 30 September 1912, the whole number of head of cattle in the province being 609,509 on 31 December 1910, the date of the last census). The reserves of the Provincial Live Stock Insurance Institute (Cattle Section) (2) which had the status of a work of public utility and received steady support from public funds, amounted on the same date to 507,082 crowns, those of the 565 local federations (3) then closing their

(1) See our issue for March 1915 (*Monthly Bulletin of Economic and Social Intelligence*), page 43.

(2) For the sake of simplicity the words "cattle section" are hereafter omitted, but it should be noted that the data given refer only to the section for the insurance of cattle. We will deal with the horse insurance section in another article.

(3) The insured of a commune are united in local federations, which are all united in the Live Stock Insurance Institute. The local federations, which have freely elected presidents, themselves bear 60 per cent. of the cost of all the benefits they pay and the Institute is liable for the remainder. Premiums received are similarly shared, and risks are thus equalized. The costs of the Institute are entirely covered from public resources.

business year to 171,675 crowns (1). The deficits of the 326 local federations, who paid benefits in excess of their receipts, amounted to 114,057 crowns, an amount covered by the supplementary premium (*Nachschussprämie*) of the business year 1913-14. The initial annual premium which was in itself very low, 1.1 per cent., was by this addition brought up to an average total of 1.27 per cent.

It goes without saying that so mighty and lasting an event as the world war of 1914-1918 had the greatest influence on the Live Stock Insurance Institute.

The great changes in the insurance during the war are shown in Table I.

TABLE I. — *Position of the Provincial Live Stock Insurance Institute of Lower Austria (Cattle Section) (1).*

Position on	Section for											
	Small holders and owners of stock						Large land and stock owners					
	Membership	Increase or decrease since previous year	Heads of cattle	Increase or decrease since previous year	Value in crowns	Increase or decrease since previous year	Membership	Increase or decrease since previous year	Heads of cattle	Increase or decrease since previous year	Heads of cattle	Increase or decrease since previous year
1	2	3	4	5	6	7	8	9	10	11	12	13
30 Sept. 1913	44,715	—	140,202	—	53,334,080	—	144	—	11,879	—	5,504,630	—
" " 1914	47,390	+ 655	142,591	+ 2,389	54,007,800	+ 673,720	149	+ 5	11,705	— 174	5,496,230	— 98,400
" " 1915	42,441	— 4,929	132,025	— 10,576	53,396,470	— 610,330	131	— 18	10,444	— 1,261	5,480,640	— 15,590
" " 1916	40,262	— 2,179	123,005	— 9,020	77,014,110	+ 23,617,640	126	— 5	9,323	— 921	6,885,160	+ 1,404,520
" " 1917	36,084	— 4,178	108,932	— 14,073	91,092,910	+ 14,078,800	110	— 16	8,070	— 1,453	8,501,400	+ 1,616,240
" " 1918	33,100	— 2,984	86,715	— 21,217	80,368,710	— 10,724,160	103	— 7	6,465	— 1,605	7,940,280	— 552,120

(1) These and the other statistical data are taken from this Institute's annual reports at the offices of the provincial administration. They are included in the appendices to the shorthand reports of the provincial diet of the Archduchy of Austria below the Enns.

(1) When compared with the total receipts from premiums, 847,322 crowns in the business year 1912-13, these reserves perhaps seem trifling, especially in comparison with those of other branches of insurance. But owing to the relatively small value and the short lives of the objects of the insurance, the fairly good distribution of risks over the area affected, the provision in the statutes for the further liability of members (supplementary premiums), and above all the fact that behind the Institute there are the resources of the provincial administration, these reserves appear to be sufficient. In any case their desired increase has been obtained in the sequel. See columns 8-11 of Table II. It is noteworthy that the liabilities of the Institute on 31 March 1910 reached 124,726 crowns, that at the end of 1912 the Provincial Live Stock Insurance Institute of Carinthia showed reserves of only 24,894 crowns, that of Upper Austria reserves of only 41,475 crowns, that of Moravia liabilities of 98,650 crowns and that of the Tyrol liabilities of 37,943 crowns (See Table III, columns 4 and 5 in the article already cited).

THE LIVE STOCK INSURANCE INSTITUTE OF LOWER AUSTRIA

The fall in the number of insured members and insured cattle and the increase in insured values are striking.

Many farms ceased to be worked, because the farmer's wife could not manage them after her husband had been called to the colours, because he had fallen, or because of the numerous difficulties which the war brought to every owner of live stock. In particular there were many withdrawals from membership in the large land and stock owners' section (1). In addition to the reasons for them which we have mentioned these withdrawals were principally due to the fact that the fears of epidemics so general at the outbreak of war were in the event little realized, that the good chances of realizing the value of carcasses when mortality occurred from other causes almost removed the fear of large financial loss, and that the average losses over several years were less than the premiums payable (this state of affairs, tantamount to self-insurance, presupposes good and lasting possibilities of realizing the value of carcasses and would cease to exist if conditions were to change).

The fall in the number of insured animals is connected with the withdrawals from membership, but more particularly with the large decrease, due to war conditions, in the total herds of the province. The rise in insured values is connected with the rapid rise in the price of butchers' stock and draught cattle.

The average insured value of a head of cattle was :

on 1 September 1913	387	crowns
» 1 » 1914	385	»
» 1 » 1915	413	»
» 1 » 1916	633	»
» 1 » 1917	851	»
» 1 » 1918	948	»

The war had a great influence on the Provincial Live Stock Insurance Institute of Lower Austria, on its business and on its financial development. A number of officials and employees answered the call to the colours; many presidents and agents of the local federations had to join the army. A large exodus of veterinary surgeons and skilled stockmen

(1) Cattle owners owning more than 40 head and large landowners are united in four special associations as they represent an essentially special risk. In Table I and to some extent in the other tables these associations are shown distinctly in so far as their development differs from that of the others.

made it difficult to care for sick animals and those in need of help (1); and the changes of staff, which were sometimes sudden, sometimes led to all kinds of difficulties, although the newly recruited forces, especially the wives of the conscribed stockowners, their children, and eventually even the old men who were in need of rest, all did their best (2).

In consequence of the large needs of the army, the losses due to events of the war, the cessation of importing and the diminution of harvests, boltage had to be reduced in milling grain, and barley, maize and oats had to be used in making bread. The stockowner had no bran, or only a little and very expensive bran, at his disposal; barley might not be used as fodder; potatoes might in so far as they were not requisitioned but at the prevailing high prices were more profitably sold fresh. Natural fodder had to be delivered to the military authority, and the high offers of owners of carts and carriages in the town caused what was left to be sold. A series of bad forage harvests, due alternately to extraordinary drought and prolonged rains, made the good feeding of stock more difficult (3).

(1) The number of cases of loss due to difficult parturition is characteristic and shows how ill were the effects of a lack of skilled help. In the last year of peace 3.03 and 2.22 per cent. of all the losses by sickness or accidents for which damages were paid were due to difficult parturition. This percentage was:

In 1914-15	5.36
1915-16	5.60
1916-17	5.54
1917-18	3.85

(2) Enough credit cannot be given to all responsible for the fact that live stock, like human, epidemics, in no sense attained to threatening proportions in spite of unfavourable conditions, and in spite of the transportation, often in an unsuitable way, of a large number of infected and even of some sick beasts. All illnesses of an epidemic nature were confined, in so far as the Insurance Institute was concerned with them, to a quite trifling number of cases which had no influence on the course of the payments of damages. Even the rather serious outbreak in the first year of the war of foot-and-mouth disease, which was felt principally in the districts on the Hungarian border, lost all significance in the following years. The following are the percentages of losses due to foot-and-mouth-disease in the several years:

1913-14	1.69
1914-15	5.12
1915-16	0.72
1916-17	1.22
1917-18	0.03

(3) The high percentage of deaths during the war in consequence of bone softening is indicative of the quality of the available fodder. This percentage was:

In 1913-14	1.57
" 1914-15	3.46
" 1915-16	2.15
" 1916-17	3.75
" 1917-18	31.90

There was a lack of oleaginous seeds and therefore of oilcakes. Brewers' grains had disappeared from the market when brewing was discontinued; the production of molasses diminished with that of sugar. The lack of men, draught animals, chemical manures and machinery had a bad effect on fields, meadows and pastures, whence came scarcer harvests; there was a lack of skilled herds and mountain herdsmen (1); deficient light made the care of stalled stock difficult. These and many other difficulties hindered stockfarming, caused a decline in the health and productivity of the animals (2), caused breeds to degenerate, and often led to disease, wasting or even death.

The following figures, which give the percentages of losses in single years (percentages which the animals constituting losses formed of all the insured animals), show that a not negligible fall in these percentages occurred during the war. (The many cases of bone softening in 1917-18 caused a temporary rise in the losses).

Out of every 100 head of cattle insured the Institute paid damages :

in 1899	on 1.35 head
» 1900	» 1.62 »
» 1900-1901	» 2.25 »
» 1901-1902	» 2.43 »
» 1902-1903	» 2.18 »
» 1903-1904	» 2.14 »
» 1904-1905	» 2.35 »
» 1905-1906	» 2.37 »
» 1906-1907	» 2.47 »
» 1907-1908	» 2.83 »
» 1908-1909	» 3.47 »
» 1909-1910	» 2.71 »
» 1910-1911	» 2.78 »
» 1911-1912	» 2.52 »
» 1912-1913	» 2.60 »
» 1913-1914	» 2.93 »
» 1914-1915	» 2.18 »
» 1915-1916	» 1.40 »
» 1916-1917	» 1.97 »
» 1917-1918	» 3.40 »

(1) The cases of deaths due to flatulence, a cause which experience shows generally to arise out of insufficient or at least negligent care, formed the following percentages of total losses :

1913-14	4.29
1914-15	5.25
1915-16	9.14
1916-17	6.02
1917-18	5.63

(2) The productivity of cattle is well known to be best reflected in the milk secretion of cows. The Vienna milk supply is indicative of the fall in the number of milch-cows and their yield of milk. In 1914, 900,000 litres of milk were delivered in Vienna every day; at the end of 1918 only 64,000 litres.

This fall in the number of losses on which the Institute paid damages which is in apparent contrast to what has been said above, is traceable to two circumstances, both equally arising out of war conditions.

Every commune was directed several times during each year to deliver live stock to supply the needs of the army or of the large towns and industrial centres. As many conditions with regard to the age, sex and quality of the cattle were not laid down, the owners largely got rid of their inferior or sickly animals and thus remained in possession of their strong and healthy cattle (The cattle taken over were at once slaughtered and were then accepted on the basis of an official weighing and valuation, so that deliveries of the kind described were not a direct injury to the military authority).

The Insurance Institute was however spared paying damages on many animals which would have had to be slaughtered, as a matter of necessity, had they been kept longer.

This weeding out of the larger risks is particularly conspicuous if the numbers of losses caused in single years by the appearance of tuberculosis be compared.

Of every 100 losses those of which tuberculosis was given as the cause numbered :

in 1913-14.	13.05
» 1914-15.	11.29
» 1915-16.	9.52
» 1916-17.	7.90
» 1917-18.	5.53

This position seems to be very encouraging from the point of view of the health of the country's herds but should not be regarded as entirely favourable. In spite of the very rigorous weeding out of all inferior animals (it should be noted that during the war the herds of the province were diminished by a very high percentage), the deterioration of the general health of the animals owing to the unfavourable feeding and herding conditions, already mentioned, must have been the prevailing fact.

The second circumstance, which helped to lessen the losses for which the Insurance Institute was liable to pay damages, was the steadily rising price of meat, hides and all by-products during the war. This many times higher market-value together with the lack of meat, which brought about the disappearance of earlier prejudices against compulsorily slaughtered animals, greatly facilitated the marketing of carcasses and made market conditions yet more favourable. It even often happened that receipts for a slaughtered animal were higher than the damages would have been which the Insurance Institute would have had to pay for it. (According to the rules 80 per cent. of the insured value is payable as damages, but only 65 per cent. when the loss is caused by

tuberculosis). Thus the Institute escaped paying damages for many head of cattle.

For the same reason the percentage of value recovered by the sale of damaged animals rose: the percentage which such receipts formed of the insured value of the animals on which the Institute paid damages rose during the war to the advantage of the Institute, since the sum for which the latter was liable diminished proportionately (See Table III, columns 4-II).

These circumstances, together with a rise in premiums of which we will speak presently, led to a consistently favourable financial development, which is seen in Table II (page 28).

The large increase in the insured value of the cattle naturally means for the Institute an essentially higher risk which in the meanwhile, while market conditions for inferior animals and the high price of meat are maintained, can hardly become dangerous. In order to provide in good time for an alteration which will certainly occur sooner or later in the conditions favourable to the Institute, and to prevent beforehand and by practical means the eventual occurrence of a catastrophe, the Institute was induced to increase its receipts by fixing a newer and higher tariff of premiums, and at the same time to endeavour to reduce damages, without injuring the interests of the insured, by raising as high as possible the receipts for carcasses.

The following is the tariff of premiums valid since 1 October 1916:

Cattle worth		Yearly premiums	
from (crowns)	to (crowns)	for male animals	for female animals
	1,500	1.4 %	1.4 %
1,500	2,000	2 %	1.7 %
2,000	3,000	2 9/10 %, and 25 heller for every 100 crowns of insured value beyond 2,000 crowns	2 %, and 25 heller for every 100 crowns of insured value beyond 2,000 crowns

Simultaneously, to avoid difficulties, rebates of premiums, such as had already been partly conceded in the time of premiums of less than 1.1 per cent., were universally introduced for local federations working well and uninterruptedly and having well endowed funds of their own. Many federations thus benefited by an equitable cheapening of insurance.

In order to avoid over-insurance most effectively maximum values were fixed:

TABLE 11. — *Annual Developments of the Live Stock Insurance Institute (Cattle Section) of Lower Austria.*

Year	Total number of insured cattle	Premiums received					Contributed by			Position of funds				Number of local federations (2) which closed showing a deficit	Grants from local reserve fund to local federations showing a deficit
		by the Institute	by the local federations		the State	the province for the constitution of a reserve fund (1)	of the Institute		of all the local federations (2) which closed showing a deficit	credit balance	deficit				
			Initial premiums	Supplementary premiums			Reserve	Extraordinary war reserve							
1	2	3	4	5	6	7	8	9	10	11	12	13			
1912-13	152,081	298,907	430,729	117,687	100,000	45,624	507,082	—	{ 1,256 { 170,419	{ 19,585 { 94,472	{ 326 { 14,680				
1913-14	154,296	344,788	413,963	131,418	50,000	46,239	626,026	—	{ 897 { 162,300	{ 21,080 { 145,986	{ 423 { 20,000				
1914-15	142,459	304,565	457,197	175,677	50,000	42,738	732,978	90,000	{ 12,652 { 258,608	{ 1,421 { 42,752	{ 199 { 28,230				
1915-16	132,528	509,784	776,078	47,332	100,000	39,758	946,066	420,000	{ 62,587 { 647,730	{ — { 9,082	{ 37 { 10,550				
1916-17	117,002	598,058	907,313	6,490	—	35,101	1,108,330	680,000	{ 65,209 { 967,606	{ — { 5,276	{ 16 { 3,100				
1917-18	93,210	824,293	475,632	—	—	27,963	1,111,665	750,000	{ 56,446 { 962,733	{ 2,166 { 9,647	{ 21 { —				

(1) The provincial administration of Lower Austria also pays the expenses of the Veterinary Commission when losses are estimated (28,465 crowns in 1916-17), the costs of auditing (40,324 crowns) and costs of management (232,076 crowns). — (2) The figures regarding large and small holdings are given separately, the upper figures referring to the former and the lower figures to the latter.

THE INSURANCE INSTITUTE OF LOWER AUSTRIA LIVE STOCK

Heifers up to 6 months old may not be valued (1) at more than 800 crowns									
"	9	"	"	"	"	"	"	"	1 000
"	12	"	"	"	"	"	"	"	1,500
"	18	"	"	"	"	"	"	"	1,800
"	2 years	"	"	"	"	"	"	"	2,000
"	3	"	"	"	"	"	"	"	2,200
Cows									2,500
Bullocks up to 6 months " " " "									900
"	9	"	"	"	"	"	"	"	1,100
"	ad 1 year	"	"	"	"	"	"	"	1,600
"	1 ½ years	"	"	"	"	"	"	"	1,900
"	2	"	"	"	"	"	"	"	2,200
"	3	"	"	"	"	"	"	"	2,500
Oxen and bulls									3,000

The rise in the sums received for carcasses which will naturally reduce for the Institute payments for damages, was arrived at by facilitating the delivery of this merchandise to butchers and others, and by awarding to insured persons a "utilization premium," thus interesting them in the transaction.

This premium is paid, in addition to the normal damages of 80 per cent. of insured value, when the receipts for meat, hide and by-products exceed the half of the insured value. To reward especially good marketing of the carcass, the premium was graduated. When receipts for the carcass exceed 50 but are less than 60 per cent. of the insured value, the premium is 5 per cent., so that not 80 per cent. but 85 per cent. of the estimated value is paid. When these receipts are between 60 and 70 per cent. of the insured value the premium rises to 10 per cent. ; when they are between 70 and 80 per cent. thereof it is 15 per cent. ; when they are 80 per cent. thereof it is 20 per cent. and the full estimated value of the animal is therefore paid (2). Since the insured person has a chance of claiming considerably higher damages if the carcass is well marketed, he takes trouble to sell them as well as possible, that is as profitably as possible for the Institute. (Hitherto the good or bad marketing of the carcass of a compulsorily slaughtered animal, and even the question of whether or not it is marketed at all, has been a matter of much indifference to the Institute).

By these two measures the Institute succeeded, without lessening

(1) These maxima were to be proportionately raised, as required, at the beginning of the new business year, that is on 1 October 1919.

(2) In the case of animals slaughtered because they have tuberculosis damages rise in the same measure and are, respectively, 65, 70, 75, 80 and 85 per cent. of insured value.

the utility of the insurance or laying an unduly heavy additional burden on the insured, in essentially improving its position and strengthening its reserves.

Since there was however still a possibility that local federations would close their year's books showing a deficit, because of increased damages paid on more valuable cattle, a new intermediary body was introduced, the Reinsurance Federation (*Rückversicherungsverband*). From its resources, made up, in accordance with needs, of receipts from premiums, all damages will be paid for cattle worth more than 500 crowns, in so far as the risk they represent is not covered by the Institute.

A résumé of damages paid during the years of war is given in Table III.

TABLE III. — *Damages Paid.*

Year	Year since foundation	Number of insured animals	Number of losses					Damages in crowns	Average net sum received		Percentage formed by receipts for carcasses	Premiums for marketing carcasses additional to normal premium				Receipts additional to normal damages (r)
			Animals lost		Deaths		Total		For one lost animal owned by smallholder	For one lost animal owned by large stock farmer		of the %	of the %	of the %	of the %	
			Animals lost	Percentage	Animals lost	Percentage										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1912-13	15	152,081	3,308	51.36	758	18.64	1,066	1,286,202	122	165	31.40	—	—	—	—	—
1913-14	16	154,926	3,864	81.71	863	18.21	1,727	1,195,377	119	163	30.13	—	—	—	—	—
1914-15	17	142,450	2,516	76.64	776	23.36	3,322	1,060,113	143	197	36.30	—	—	—	—	—
1915-16	18	132,522	2,511	72.78	569	27.22	2,040	1,060,310	71	303	17.01	—	—	—	—	—
1916-17	19	117,000	2,006	81.71	419	18.24	2,175	1,999,388	113	553	18.11	0.25	25.00	160	1	1.14
1917-18	20	93,210	2,800	83.51	301	11.19	3,166	2,302,170	186	111	17.13	188	3.00	246		10

(x) In these cases the whole insured value was paid

Altogether the Provincial Live Stock Insurance Institute paid, for 72,594 cases of loss, damages amounting to 22,340,168 crowns.

By a law of 23 December 1917 (R. G. Bl. No. 501) as to reinsurance agreements (published in March 1918 by Manz of Vienna) the amendment of the Institute's statutes was ordered, but not in any essential point.

The expansion of the Institute by adding to it a new section is planned for the near future. The costs of management of this new branch are to be met from the receipts from premiums.

Independently of the existing sections for the insurance of cattle and

horses, owners of live stock are to be enabled to insure against the losses which may occur among horses and cattle :

- (1) As a result of pregnancy and diseases consequent thereon ;
- (2) As a result of castration and other operations ;
- (3) While animals are pastured for the summer on meadows and mountains ;
- (4) During transport ;
- (5) During shows ;
- (6) As a result of the confiscation of meat which is unfit for use and is derived from animals slaughtered for trade ;
- (7) As a result of epidemics.

This last branch of the insurance will cover damages resultant on the following diseases : foot-and-mouth disease, anthrax, rabies, glanders influenza, pulmonary pthisis occurring on farms not insured against ordinary losses.

Further, owners of small live stock are to be enabled to insure their stock, especially their pigs and goats. This will meet an essential and widely felt need, and a desire which is steadily growing with the initial price of live stock and the high cost of fodder.

If all the facts we have stated be regarded, it will be recognized that the Institute made a very satisfactory forward movement, actually during the difficult years of the war, and that this is the best proof of its suitability to existing conditions, and of its felicitous leadership and the great significance of all this branch of insurance to provincial and national economy.

SPAIN.

OLD AGE PENSIONS FOR RURAL WORKERS.

SOURCES: OFFICIAL:

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For some time past much attention has been directed in Spain to the question of old age pensions, not only for industrial workers but also for rural labourers. Early in 1918 the National Institute of Thrift (*Instituto Nacional de Previsión*), with the approval of the Minister of "Fomento" appointed a National Commission (*Ponencia Nacional*) to draw up proposals for a law for creating a more wide-spread system of old age pensions. The Commission was assisted in its work by committees in the different regions and meetings were held in various parts of the country to arouse interest in the question.

The Bill drawn up by the Commission was adopted by the Government and introduced into the Chamber of Deputies in February 1919. It was approved by the Chamber and favourably reported upon by the Permanent Committee of the Senate. It would undoubtedly have been passed by the Senate, had the Cortes not been dissolved, and the Government decided to put its provisions into effect by means of a Royal Decree.

§ 1. THE DECREE OF 11 MARCH 1919 ON OLD AGE PENSIONS.

The system of old age pensions which is created by the Royal Decree of 11 March 1919 is an extension of the system established by the Law of 27 February 1908. It was under this Law that the National Institute of Thrift was created to carry into effect a system of voluntary, but subsidized, old age insurance. Workmen were allowed freely to insure themselves with the National Institute and the State supplemented the contributions of those who did so.

The present Decree makes it obligatory upon the employers to pay contributions for the insurance of their workmen and upon the workmen to pay supplementary contributions, while the State also contributes.

The persons to whom the Decree applies are all wage-earners between

16 and 65 years whose total income from all sources does not exceed 4,000 pesetas per annum. These persons are divided into two groups -- those who at the date when the Decree came into force had not yet reached the age of 45 years and those who had reached that age.

For the first of these groups, a so-called "initial" pension of 365 pesetas per annum from the age of 65 years will be provided by means of contributions paid by the State and by the employers. The contribution paid by the State will be the maximum amount payable under Section 21 of the Law of 27 February 1908, which was 12 pesetas per annum. The employers' contribution will be calculated as the precise supplementary contribution necessary, according to the legal tariff, to insure the "initial" pension. This varies from 88 centimos, if the contributions begin when the worker is 17 years old, to 7 pesetas 96 centimos when the worker has reached 45 years of age.

The "initial" pension will, after an interval to be fixed, be converted into a "normal" pension by means of a compulsory contribution paid by the worker. If the worker so wish, however, his contribution may be applied to procure a temporary pension at an earlier age than 65 years or the payment of an indemnity to his heirs in case of his death. Besides the compulsory contribution a worker may pay such voluntary contributions as will increase his pension to an amount not exceeding 2,000 pesetas a year, or will increase the indemnity payable at his death to an amount not exceeding 5,000 pesetas.

It will be open to regional, provincial, or municipal bodies, or to the employers to increase the benefits enjoyed by the workers, or to the workers to do so themselves by means of their own organizations.

On behalf of the workers belonging to the second group the employers will pay a uniform contribution which will be equal to the average contribution payable on behalf of workers of the first group. The workers themselves will follow the same rules in regard to contributions as those of the first group, but they will benefit to a greater extent by the State subsidy. In addition to the State contribution of 12 pesetas per annum other contributions will be paid from certain State funds which will be allocated for this purpose. Private donations will also be accepted and applied to increasing the contributions. An account will be opened for each worker with the Postal Savings Bank, or with any of the Savings Banks placed under the control of the Ministry of the Interior, and to this account the contributions from all sources will be placed.

If a worker of the second group dies before he reaches 65 years, the employers' contribution and the worker's own contributions, together with the accumulated interest, will be handed to his heirs. If he becomes incapacitated for work before the age of 65 years he can elect either to take the same sum as would be payable to his heirs on his death, or to obtain certain other benefits. If in the event of his reaching the age of 65 years without having become incapacitated the contributions from all sources placed to his credit, together with interest accrued, are sufficient to purchase an annuity of 180 pesetas, this will at once be done

through the National Institute of Thrift. If not, the capital will be transferred to whatever institution, public or otherwise, may be obliged by law to render assistance to the worker until his death. Failing such institution, the capital sum may be handed to any person or group of persons who will undertake to support the worker, and if no such person or persons can be found, the money may be handed to the worker himself.

The system will be carried out through the National Institute of Thrift, autonomous auxiliary institutions in each region or province, and insurance institutions working in conjunction with them. The last-named institutions must partially reinsure with the regional or provincial institutions and these, in turn, with the National Institute. All insurance bodies, whether official institutions, commercial companies, or associations, legally domiciled in Spain, may carry on old age insurance business, provided they give the necessary guarantees, and will benefit by the State subsidy. Uniform tariffs will be established, to which will be added a uniform charge to cover expenses of administration.

Part of the reserve funds may be invested in loans for the construction of cheap and sanitary houses and schools and of consumption sanatoria, or in loans to agricultural associations and other societies which tend to promote the general welfare.

§ 2. THE SCHEME OF THE GENERAL STOCKOWNERS' ASSOCIATION.

The Decree of 11 March 1919 was applicable only to industry, but it was laid down in one of the sections that the application of old-age insurance to agriculture should be immediately studied and the preparatory work necessary to that end should be undertaken.

Without waiting, however, for the application of a compulsory system, the Permanent Committee of the General Stockowners' Association (*Asociación General de Ganaderos*) drew up a scheme for a voluntary system whereby stockowners may insure their workmen and the workmen may make contributions for the purpose of increasing the pension. The system follows as closely as possible the lines of the system laid down in the Decree, so that when old age insurance is made compulsory in agriculture, little or no change will be required.

According to the Association's scheme, members may register their workmen either in the offices of the Association or in those of the affiliated provincial association or provincial committee. They can then bind themselves to pay the same monthly contribution in respect of each workman as they would pay if the Decree were applicable to agriculture.

In order to encourage labourers to remain on the same farm, the Association will give prizes to labourers who have remained at least three years in the same employment, have made insurance contributions in each year, and about whom the employer and the provincial association or committee report favourably. The prizes will take the form of additional

contributions paid on behalf of the labourer and will serve either to increase his pension or the sum payable to his heirs.

With the same object, the Association urges its members to pay additional contributions on behalf of married workers or of workers of thrifty habits, who have been long in their employment. These contributions would be utilized to raise the amount of the pension from 365 pesetas per annum to 500 pesetas per annum and, at the same time, to make it possible that, in the event of the death of the workman before he reached 65 years, the accumulated contributions would be paid to his heirs. The monthly contribution which is necessary to effect this varies from 1.35 pesetas, if it begins when the workman is 18 years old, to 5.75 pesetas, if he has reached 45 years. It is suggested, however, that the employer should pay annual contributions of 12, 18 or 24 pesetas, beginning as soon as the workman has been three years on the farm. If, in the event of the death of the workman before reaching 65 years, the additional contributions accumulated are less than they would have been if the employer had paid monthly contributions according to the tariff, the sum paid to the heirs will be the accumulated extra contributions plus a proportionate part of the accumulated normal contributions.

§ 3. THE SCHEME OF THE FARMERS' ASSOCIATION OF SPAIN.

The Farmers' Association of Spain (*Asociación de Agricultores de España*) has also put forward a scheme for the insurance of rural workers.

In order to insure to the workers a minimum pension of 365 pesetas per annum from the age of 65 years, the members of the Association are invited to pay to the National Institute of Thrift, through the Farmers' Association, a collective premium which would average 10 centimos for each day of work. When a worker remains less than five days on one farm, the employer will pay 50 centimos, this being the lowest premium which the Institute will accept.

For workers of over 45 years of age the contributions will be applied in the same manner as is laid down in the Decree for this group of workers.

To encourage workmen to remain on the same farm, it is suggested that members of the Association should pay additional contributions of 25 pesetas per annum on behalf of workmen who have been three years in their employment. These would be utilised in the same way as is proposed by the Stockowners' Association.

An interesting suggestion made by the Farmers' Association is that the workers should be encouraged to form what are called Provident Land Clubs (*Cotos sociales de Previsión*). These Clubs were first proposed by Sr. Malaquer, to whom the idea was suggested by reading, in "El Colectivismo agrario," by Joaquín Costa, an account of certain corporations of the Middle Ages who possessed land which they worked in common with the object of obtaining the means of holding an annual banquet.

Sr. Malaquer proposed that a similar plan should be adopted in order to obtain funds for the payment of old age insurance premiums. Already a few of these "provident land clubs" exist in Spain and the Decree of 11 March 1919 authorizes the application of portions of the special insurance funds (other than the technical reserves) which are not required for possible sudden emergencies to obtaining land for such clubs.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FRANCE.

1. JOINT STOCK AND LARGE MUTUAL SOCIETIES INSURING AGAINST MORTALITY AMONG LIVE STOCK IN 1918. — *Le Moniteur des Assurances*, Paris, 15 October 1919.

Although the value of stock has become enormous, the capital insured by the joint-stock and the large mutual societies and their receipts are found to be no greater than before the war.

Two societies insure large capital values, namely the *Avenir* 35,000,000 francs and the *Garantie Fédérale* about 20,000,000 francs. The *Fédération des Agriculteurs Français*, with 6,357,000 francs, also has a high place.

We reproduce from *Le Moniteur des Assurances* the few statistical data which it has been possible to collect, and which concern five societies.

Names of societies	Capital insured 1918 francs	Receipts francs	Benefits francs
Avenir (Paris)	34,683,707	1,207,796	1,254,956
Bon Laboureur (1)	11,377,105	395,440	183,652
Garantie Fédérale	—	846,878	500,504
Fédération des Agriculteurs français . . .	6,357,830	273,409	130,194
Bétail	359,302	12,662	1,497

(1) The figures given for the *Bon Laboureur* refer to the first half of 1919.

The following table, taken from the report of *Avenir*, shows the course of this society's business during the last decade.

Years	Number of policies	Value insured	Receipts	Benefits
		francs	francs	francs
1909 . . .	12,567	32,359,910	1,203,851.45	1,004,164.00
1910 . . .	13,306	34,380,758	1,294,151.35	1,193,245.00
1911 . . .	11,230	37,065,681	1,372,315.20	1,253,195.00
1912 . . .	14,824	39,062,510	1,438,757.05	1,171,329.00
1913 . . .	15,628	41,530,243	1,509,740.30	1,236,934.00
1914 . . .	15,739	42,460,108	1,573,521.65	1,321,016.50
1915 . . .	14,746	41,108,803	1,234,480.75	884,633.00
1916 . . .	12,135	37,709,043	1,010,605.30	934,894.09
1917 . . .	11,727	39,965,863	1,066,525.75	1,100,880.00
1918 . . .	12,000	41,267,142	1,207,796.00	1,254,985.50

Where receipts and settlements are concerned the *Avenir* leads

The <i>Avenir</i>	pays	95 per cent. of losses
» <i>Garantie fédérale</i>	»	90 » » » » for horses.
» <i>Fédération des Agriculteurs</i>	»	100 » » » » » cattle.
<i>français</i>	»	80 » » » »

+

2 A FEDERATION OF LIVE STOCK MUTUAL SOCIETIES DURING THE WAR —
Bulletin mensuel de la Société Centrale des Agriculteurs et des Comités et Associations agricoles de la Suisse, Chambéry, 15 October 1919

The Federation of Mutual Live Stock Societies of Savoy grouped, between 1907 and 1917, a number of small societies, as is shown by the following table

Year	Cattle		Donkeys and mules			
	Number of mutual societies	Insured capital	Number of mutual societies	Insured capital	Number of mutual societies	Insured capital
		francs		francs		francs
1907	30	1,22,760	7	62,349	2	1,400
1913	62	1,245,985	10	107,360	5	59,910
1916	89	4,960,170	13	113,050	5	57,550
1917	85	8,075,815	9	157,500	4	94,400

In 1918 the number of mutual societies insuring donkeys and mules and horses did not vary, but the number insuring cattle increased to 90.

An examination of the results of the year led to the following table :

	Cattle	Donkeys and mules	Horses	Total
Membership	4,004	241	77	4,322
Number of insured animals	13,109	194	78	13,381
Total value	8,075,615	157,590	91,400	8,327,605
Number of animals lost	239	4	1	264
Benefits, on the basis of 75 per cent. of gross losses	97,003.75	2,025.00	675.00	99,703.75
Real loss, after deduction of value of animals' remains,	63,109.70	1,911.00	615.00	65,635.70

As regards subscriptions, the mutual societies are divided into several categories which pay on different tariffs. Tariffs for cattle vary from 0.075 to 0.40 per cent. of the insured capital, those for donkeys and mules from 0.20 to 0.60 per cent. thereof, those for horses from 0.30 to 0.40 per cent. thereof.

During the last twelve years the amount of losses has been as shown in the following table.

Year	Percentage of capital represented by total loss	Percentage of total loss represented by value of remains	Percentage of insured capital represented by net loss (including cost of veterinary attention and drugs)
1907	1,331	35.11	0.911
1908	1,244	41.49	0.725
1909	1,565	42.02	0.958
1910	1,488	36.42	1.009
1911	1,482	32.76	1.083
1912	1,499	30.83	1.162
1913	1,522	33.29	1.078
1914	1,230	24.51	0.961
1915	1,448	30.41	1.036
1916	1,262	40.61	0.814
1917	1,223	35.58	0.815
1918	1,197	34.16	0.805

It is not without interest to note the unequal distribution of losses over the various months of the year. The 264 losses of 1918 were distributed as shown in the appended list of months.

January.	15	August.	33
February	10	September	32
March	10	October	19
April	19	November	20
May	26	December.	25
June	30		-
July	24	Total	264

Part III: Credit

ITALY.

THE AGRICULTURAL CREDIT OF THE SAVINGS-BANK OF THE BANK OF NAPLES IN 1918.

SOURCES:

BANCO DI NAPOLI: CASSA DI RISPARMIO CREDITO AGRARIO RELAZIONE SULL'ESERCIZIO 1918.
(*Bank of Naples: Savings-Bank. Agricultural Credit. Report on the Year 1918*). Naples,
1919

The exceptional conditions arising out of the war, and the ever increasing need of giving all possible extension to grain growing, induced the government to grant last year, with a view to obtaining this increased cultivation, large cash advances for distribution among farmers by means of the special institutions of agricultural credit. This State action began in 1916, and the sums thus expended amount altogether to 68,843,650 liras, namely 13,729,928 liras in 1916, 20,255,103 liras in 1917 and 34,858,619 liras in 1918. In 1918 the Bank's savings-bank drew the resources needed for affording agricultural credit from three sources — (1) its own deposits, as by the law of 7 July 1901, No. 334; (2) as by the law of 2 February 1911, No. 70, the funds of the provincial banks of agricultural credit which it manages; (3) the funds supplied, for special purposes, directly by the State.

On the credit afforded by the two former of these sources 13,950,273 liras were employed; on that derived from the third source the sum employed was, as we have already said, 34,858,619 liras. The total sum advanced to the farmers of the southern provinces of the kingdom and Sardinia was therefore 48,808,892 liras. We will describe the manner and terms of these advances.

§ I. THE DEVELOPMENT OF THE INSTITUTIONS DISTRIBUTING AGRICULTURAL CREDIT.

The savings-bank of the Bank of Naples is authorized to afford agricultural credit in the southern provinces of the kingdom and Sardinia by

the law of 7 July 1901, No. 334; and the law of 2 February 1911, No. 70, entrusts to it the management of the provincial banks of agricultural credit in eleven provinces of continental Southern Italy. Both laws affirm the fundamental principle that credit granted to farmers for the needs of tillage must not, as a rule, be granted by the bank directly, but must reach them through the medium of the lesser local institutions, preferably co-operative in form, which are called intermediary institutions (*enti intermediari*) in virtue of this function, and that the bank can make direct loans to farmers only when such institutions are lacking. Among them those declared to be "good", that is fit to make a useful and fruitful distribution of agricultural credit, numbered 1223 on 31 December 1918, having increased by 10 since the previous year chiefly because new agricultural banks, or co-operative loan societies with unlimited liability, had been formed. The aforesaid 1223 "good" institutions are distributed as follows:

Agricultural and rural banks.	506
<i>Monti frumentari e nummari</i> of Sardinia . . .	288
Popular banks	140
Agricultural consortia	126
Agricultural lending banks	119
Savings-banks	15
<i>Monti frumentari</i>	8
Agricultural credit societies	8
Mutual aid societies	7
Autonomous provincial agricultural credit banks	6
	— —
	1,223

Among these institutions the societies with unlimited liability which number 506, occupy the first place and increase year by year as an effect of the Institute's active and constant propaganda work. The spread of societies of this kind is proof that farmers have understood them to be of the type most suited to small local institutions, the collective and unlimited liability of their members almost taking the place of share-capital, and promoting among the members a mutual and effective control which goes to ensuring that the sums lent are really devoted to the benefit of agriculture.

The institutions are distributed among provinces as shown in Table I.

The largest number of them — leaving the *Monti frumentari e nummari* of Sardinia out of account — is found in the province of Cagliari which has 136. Next come the province of Caserta with 104, that of Salerno with 80 and that of Aquila with 65. The smallest number, namely 16, is found in Cosenza province.

TABLE I — *Classification by provinces of "good" institutions*

Provinces	Agricul tural consortia	Agricul tural and rural banks	Agricul tural lending banks	Monti piumieri of Sardinia	Agricul tural credit societies	Monti piumieri of Sardinia	Mutual and societies	Popular banks	Savings banks	in t nominal provincial banks of agricul tural credit	Total
Aquila	1	57	—	—	1	—	—	6	—	—	65
Feramo	3	16	32	—	—	—	—	9	4	—	64
Chieti	3	15	7	—	1	—	—	4	2	—	33
Campobasso	3	16	7	—	—	—	2	2	—	—	28
Bari	6	9	—	—	—	—	—	9	5	—	31
I Oggi	17	6	2	—	—	—	—	15	1	—	50
Iacce	17	18	8	4	—	—	—	10	—	—	57
Avellino	3	37	3	—	—	—	—	4	—	—	47
Salerno	3	25	9	—	—	—	—	3	—	—	50
Naples	2	16	—	—	—	—	—	6	—	—	21
Benevento	10	21	—	—	3	—	—	7	—	—	41
Caserta	23	44	10	—	—	—	—	26	1	—	104
Potenza	—	10	—	—	—	—	—	11	—	1	21
Cosenza	6	1	1	—	—	—	1	3	—	1	16
Catanzaro	10	8	11	1	—	—	2	8	—	1	41
Reggio	2	15	—	—	—	—	1	17	—	1	36
Cagliari	6	120	—	—	—	103	—	—	—	1	329
Sassari	—	30	—	—	3	97	1	—	—	1	137
	126	506	119	8	8	298	2	110	17	6	1223

As regards associations of a purely agricultural character, the largest number of agricultural consortia, 23, is found in Cosenza province; the largest number of agricultural and rural banks, 129, in Cagliari province.

The institutions entered in the *castelletto agricolo*, that is accredited by the Bank, on 31 December 1918, numbered 742. The credit in question amounted to 28,944,100 liras. The institutions were distributed, among provinces and kinds of institution, as shown in Table II.

In respect of the amounts of the credits opened for these institutions, the lead belongs to the agricultural and rural banks which are followed by the consortia and the popular banks.

Of the 1223 "good" institutions, it has been impossible to open credits for 481. It should be noted, further, that of the 742 which were accredited, only 219 took advantage of the credits opened for them or, in other words, were active.

Having made these premisses, we will turn to consider the business accomplished in 1918.

§ 2. BUSINESS DONE WITH THE FUNDS OF THE SAVINGS BANK AND THE PROVINCIAL BANKS.

As in 1916 and 1917, two classes of business could be distinguished in 1918, *ordinary and extraordinary agricultural credit business*. By ordinary agricultural credit business, transactions are meant which were accomplished with the deposits of the savings-bank and the capital of the provincial banks, as by the law of 7 July 1901, No. 334, and 2 February 1911, No. 70. By extraordinary agricultural credit business, those transactions are meant which were accomplished with the funds advanced by the State, as by the ministerial decrees of 30 June and 24 August 1917 and 14 January and 6 October 1918. We will deal with these two classes of business separately, beginning with the first.

During 1918 the savings bank of the Bank did business for the sum of 13,950,273.02 liras, namely for 3,111,443.59 liras with its own funds and for 10,838,829.43 liras with the funds of the provincial banks. The increase since 1917 was one of 3,221,697.32 liras, and was due to the larger demand for credit particularly manifest at the Foggia, Cagliari, Lecce, Avellino and Teramo branches (1). Altogether, rediscounts amounting to 5,654,280.37

(1) The increase was not general. One agricultural association states that "small credit no longer has a reason for its existence, such is the abundance of the capital in the hands of peasants and small holders." Another association states that it has ceased to be active because of "the lack of a demand for loans from members who, the prices received for grapes being what they are, have all come to do business in cash." From yet another association comes a declaration that farmers "in view of the high prices obtained for produce of the soil, and the even higher prices paid for live stock, have realized notable profits and have not needed to have recourse to credit."

TABLE II. — *Classification of credits opened on 31 December 1918.*

Provinces	Agriculture and consortia		Lending banks		Agricultural credit societies		Sardinian Monti di piet�		Mutual aid Societies		Popular banks		Savings banks		Autonomous provincial banks of agricultural credit		Totals			
	No	Sum	No.	Sum	No	Sum	No	Sum	No	Sum	No	Sum	No	Sum	No	Sum				
	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras	liras				
Aquila	—	—	15	1,731,000	—	—	—	—	—	—	5	205,000	—	—	—	—	50 1,936,000			
Ascoli	1	1,150,000	16	8,000,000	3	15,000	—	—	—	—	9	—	4	101,000	—	—	61 2,437,000			
Chieti	3	108,000	13	335,000	3	23,000	—	—	—	—	4	46,000	—	180,000	—	—	69 69,000			
Campobasso	5	310,000	15	590,000	1	50,000	—	—	1	75,000	2	170,000	—	—	—	—	7 1,295,000			
Bari	7	774,000	6	604,000	—	—	—	—	—	—	8	1,000,000	4	300,000	—	—	25 2,084,000			
Foggia	10	1,710,000	6	210,000	2	48,000	—	—	—	—	11	1,625,000	1	—	—	—	25 3,094,000			
Lecce	10	870,000	11	350,000	3	95,000	—	—	—	—	10	235,000	—	—	—	—	51 3,093,000			
Avelino	3	208,000	30	943,000	3	1,000	—	—	—	—	4	45,000	—	—	—	—	34 1,448,000			
Bitonto	2	100,000	48	2,370,000	—	—	—	—	—	—	1	70,000	—	—	—	—	10 1,080,000			
Naples	1	95,000	5	450,000	—	—	—	—	—	—	6	170,000	—	—	—	—	31 510,000			
Benevento	10	207,000	19	348,000	—	—	10,000	—	—	—	5	120,000	—	—	—	—	13 310,000			
Caserta	13	1,003,000	36	901,000	1	50,000	—	—	—	—	2	324,000	—	—	—	—	30 805,000			
Potenza	—	—	8	185,000	—	—	—	—	—	—	11	75,000	2	5,000	—	—	7 232,000			
Cosenza	5	168,000	1	30,000	—	—	—	—	—	—	3	45,000	—	—	1	1,000,000	20 1,683,000			
Catanzaro	9	500,500	5	6,000	11	1,100	—	—	1	1,000	8	691,000	—	—	1	150,000	31 383,000			
Reggio	—	30,000	5	133,000	—	—	—	—	1	—	10	700,000	—	—	—	—	31 1,278,000			
Cagliari	7	175,000	34	276,000	—	—	—	—	—	—	—	—	—	—	1	300,000	5 1,260,000			
Sassari	3	35,000	13	410,000	—	—	3	19,000	—	—	—	—	—	—	1	500,000	73 1,144,000			
Totals	92	8,033,500	316	10,777,500	79	804,100	7	235,000	100	304,000	3	78,000	18	5,533,000	13	660,000	6	2,090,000	74	8,441,000

liras were made to intermediary institutions, direct loans amounting to 61,048 liras to farmers, and direct discounts amounting to 8,234,944.65 liras to intermediary institutions.

The rate of interest in 1918 was unaltered, remaining at 3 $\frac{1}{2}$ per cent. on business done through the medium of local institutions (rediscounts and direct discounts), and 4 per cent. on business done with farmers directly. The intermediary institutions, in their turn, charged interest on their loans at a rate varying from 3 $\frac{1}{2}$ to 6 per cent. which was most frequently 5 or 4 $\frac{1}{2}$ per cent.

Rediscounts and direct discounts can be distinguished by objects as follows :

(1) *Loans secured by a lien :*

	Number	Amount
for the harvest	59	41,018.00 liras
for tillage.	3,191	2,321,574.96 "
for seeds	1,218	335,769.078 "
for manures.	738	214,589.86 "
for fertilizers	2,937	846,725.06 "
for maintenance to <i>coloni</i>	3	1,350.00 "
for maintenance to labourers	—	— "
for various objects.	710	662 858.83 "
	8,856	4,423,885.79 liras

(2) *Loans not secured by a lien :*

	Number	Amount
for large live stock	1,068	992,039.50 liras
for small live stock	242	83,364.20 "
for machinery	68	77,304.10 "
for agricultural implements	85	76,870.41 "
for stock other than live stock	66	29,234.00 "
for various objects.	43	32,630.37 "
	1,572	1,291,442.58 liras

Of these loans (1) 7483 for 4,337,944.96 liras were granted to landowning farmers, 2627 for 1,237,443.29 liras to farmers paying rent, 179 for 38,608.94 liras to tenants by emphyteusis, and 139 for 101,531.18 liras to *métayers* or others farming on a produce-sharing system.

As for the several amounts for which credit was granted, it is enough to state that out of 10,428 loans 9682 for nearly three and a half million liras (that is 93 per cent. of the total number of loans and 63 per cent. of their total amount) were of sums less than 1000 liras, loans of sums between 100 and 500 liras greatly predominating.

Direct discounts to intermediary institutions were as follows: 416 for 7,037,612.52 liras were for the collective purchase of agricultural requisites; 13 for 784,704.60 liras for collective sales of agricultural produce; and 87 for 448,627.53 liras for supplementing the intermediary institutions' deficient resources. Almost all these discounts were made to agricultural consortia and agricultural and rural banks.

The various provinces participated to the extents shown in Table III in the total agricultural credit afforded by the savings-bank of the Bank of Naples during the seventeen years from 1902 to 1918.

During the seventeen years for which agricultural credit has been distributed in the southern and Sardinian provinces the total sums distributed have amounted to 127,484,432 liras. Of the 18 provinces which in this period have had most part in credit of this kind, the province of Foggia, which has obtained the notable sum of 31,449,815 liras (that is 24.70 per cent. of the total sum granted), has the first place. Next come the provinces of Bari and Caserta, with about twelve and a half million liras each, and the province of Aquila with eleven and a quarter million liras, while the province of Cosenza, which has received little more than a million, has derived least benefit. During the same period the outstanding loans which passed under the head of losses amounted to 731,408 liras, that is to say, to 0.58 per cent. of the total credit. Allowing for the recoveries made at various times and the effective losses, outstanding loans on 31 December 1918 amounted to only 213,094 liras. The general movement of credit during the 17 years of business were as follows: for rediscounts to intermediary institutions 88,512,478 liras; for direct discounts to intermediary institutions 35,970,107 liras; for direct loans to farmers 3,001,846 liras. To landowning farmers 54,822,117 liras were paid altogether; to farmers paying rent 34,014,701 liras; to *métayers* 1,819,622 liras; and to tenants by emphyteusis 830,883 liras. Of institutions distributing credit the first place during the seventeen years in question belonged to the agricultural consortia who distributed some 42 million liras, the second to the agricultural and rural banks (28,000,000 liras), and the third to the popular banks (nearly 13 ½

(1) Under an amendment by the lieutenant-decree of 27 February 1910, No. 658, of the third clause of Article 18 of the regulation as to the agricultural credit business of the savings-bank of the Bank of Naples, which amendment was approved by the royal decree of 21 July 1904, No. 536, the maximum loan for supplying farms with large live stock and agricultural machinery is fixed at 5000 liras, and its maximum term at three years.

TABLE III. — Credit granted to the several provinces from 1902 to 1918 (1).

Provinces	1902-06	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	Total
Aquila	403,100	133,175	213,111	511,024	170,013	1,604,313	1,373,003	1,777	1,111	401,111	973,720	821,200	1,717,500	11,249,587
Avellino	155,297	59,111	122,414	31,021	70,011	74,416	37,411	4,004	18,111	11,111	345,886	401,011	111,111	1,111,111
Bari	718,000	422,717	313,111	113,203	539,061	712,603	663,111	1,111,111	1,111,091	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111
Benvento	200,013	205,051	237,001	155,111	203,336	181,111	149,270	106,896	210,111	502,111	359,320	397,312	300,111	1,111,111
Cagliari	—	—	—	111,111	394,128	370,782	215,111	21,006	166,011	11,052	221,111	106,606	616,210	3,033,907
Campobasso	71,161	31,103	11,111	150,587	176,103	270,601	234,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111
Caserta	932,143	317,077	804,614	111,111	665,641	923,573	716,103	856,111	371,111	319,089	1,111,111	1,111,111	1,111,111	1,111,111
Catanzaro	189,206	91,111	111,111	304,026	389,957	431,111	370,662	302,090	371,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111
Chieti	186,130	111,000	111,000	47,058	80,330	124,909	146,700	101,331	111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111
Cosenza	111,111	111,111	111,111	70,498	111,111	161,817	111,003	70,111	111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111
Foggia	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111	1,111,111
Lecce	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Naples	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Potenza	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Raggio Calabria	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Salerno	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Sassari	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Teramo	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111	111,111
Totals	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111

(1) The *concessioni* have been omitted in the figures reproduced in this table: hence there are some small differences in the totals.

millions). Thus credit was for the most part distributed, as the law desires, through the medium of intermediary institutions, among which agricultural and rural banks, which are active almost exclusively in the field of agricultural economy, occupied the second place.

§ 3. TRANSACTIONS WITH STATE FUNDS.

We will now deal with the transactions accomplished by means of the funds directly advanced by the State, which we will call extraordinary agricultural business in order to distinguish them from the transactions we have already examined. They comprise grants of two kinds: (1) grants for grain growing in the districts of the provinces of Foggia, Bari and Campobasso which had been damaged by field-mice (farming year 1916-17); (2) grants for the increased cultivation of foodstuffs in the farming years 1917-18 and 1918-19.

Loans of the first of these classes attained to the total amount of 21,568,137 liras (1), reduced by various repayments to 3,447,406 liras on 31 December 1918.

Loans of the second class amounted in the farming year 1917-18 to a total sum of 13,499,059 liras, namely 8774 loans amounting to 10,554,794 liras for tillage, and 2566 loans amounting to 2,954,255 liras for seeds. According to the ministerial decrees of 30 June and 24 August 1917, as much as 100 liras per hectare might be granted for tillage. On an average 81.67 liras were granted per hectare, and the average amount of a single loan was 1224.04 liras for 14.98 hectares, whence it may be deduced that in the farming year 1917-18 credit was granted to small farmers predominantly. As regards loans for seeds, the average sum advanced per hectare was 89.903 liras, and the average amount of a single loan was 1,151.30 liras for 12.80 hectares.

In the first months of 1918 a beginning was made of granting loans for springtime work (weeding, hoeing, harrowing) at the prearranged rate of not more than 50 liras per hectare. The loans made numbered 3029, amounted to 3,065,125 liras and were for 64,755.39.17 hectares. The average sum lent per hectare was 47.33 liras, and the average single loan was 1011.92 liras for 21.36 hectares.

Provision is also made for the expense of harvest (mowing, carting, threshing, purchase of binder twine). The limit fixed for loans of this kind was 100 liras the hectare, to be increased exceptionally to 200 liras. Altogether 5537 of these loans were made, amounting to 15,365,412.62 liras, for 86 113,66.16 hectares, the average loan per hectare being 178.43 liras and the average single loan 2775.54 liras for 15.55 hectares.

Last year, under the ministerial decree of 14 January 1918, advances with State funds were also made to subsidize the cultivation of fallows in preparation for autumn sowing in 1918. The decree limited these advances

(1) For further information on this point see the article in our issue for September 1918, page 735.

to a maximum of 100 liras per hectare to be repaid with the 1918 harvest, in the case of farms partly cultivated in the autumn of 1917, and with the 1919 harvest in the case of totally abandoned farms. Altogether 1367 loans of this kind were made, amounting to 2,609,190.12 liras, for 26,421.13,48 hectares. Generally 98.75 liras were granted per hectare, and the average single loan was 1908.69 liras for 19.32 hectares.

To sum up: — The advances for the increased cultivation of foodstuffs in the farming year 1917-18 amounted to 34,538,778.71 liras, distributed by local institutions (rediscounts) as regarded 26,530,515 liras (76.81 per cent.) and to farmers directly as regarded 8,008,263 liras (23.19 per cent.). The landowning farmers had the benefit of 50.12 per cent. of the State credit, rent paying tenants and sub-tenants of 49.42 per cent., tenants by emphyteusis of 0.24 per cent., *métayers* and other produce-sharing tenants of 0.22 per cent. The total sum granted was distributed among provinces as follows: Foggia, 28,048,424 liras; Bari, 3,711,815 liras; Campobasso, 2,335,678 liras; Salerno, 215,144 liras; Lecce, 163,566 liras; Avellino, 28,322 liras; Benevento, 23,059 liras; Caserta, 11,320 liras; Aquila, 1000 liras.

To pass to advances made for the increase of the cultivation of foodstuffs in the farming year 1918-19: — Until the 31st of December of last year 4536 of these loans, amounting to 12,736,733.85 liras, were made under the ministerial decree of 6 October 1918, and were distributed as regarded 9,700,644.25 liras or 71.16 per cent. by intermediary institutions (rediscounts), and to farmers directly as regarded 3,036,089.60 liras or 23.84 per cent. Of these loans 3331 (8,861,333.25 liras) were granted for tillage, and 1205 (3,875,400.60 liras) for seed. For tillage it was allowable to advance as much as 130 liras per hectare and the average sum so advanced was 100.8 liras, the average single loan being 2660 liras for 26.38 hectares. It may thence be deduced that in the farming year 1918-19 medium and large farmers availed themselves most of this credit, while the small farmers provided for tillage with their own resources. As for seeds, the advances for their purchase were allowed to range, in accordance with cost, from 100 to 130 liras, and were actually granted at the average rate of 114.72 liras per hectare, the average single loan being 3,216 liras for 28.03 hectares.

* The sum of 12,736,733.85 liras of which we have spoken was distributed as follows among the various provinces: Foggia 10,655,460.45 liras; Campobasso 971,121 liras; Bari 817,763.60 liras; Salerno 236,030 liras; Caserta 19,838.80 liras; Legge 16,000 liras; Avellino 13,160 liras; Aquila 5060 liras and Benevento 2800 liras.

On the sums directly granted to farmers, that is the direct loans, the Bank's savings-bank placed the rate of the interest charged by the provincial banks concerned at 5 per cent. On rediscounts to local institutions the rate of interest was 3 $\frac{1}{2}$ per cent., as in ordinary agricultural credit business, while the local institutions charged interest at the rate of 5 per cent. to borrowers.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES

FRENCH COLONIES.

THE COLONIAL BANKS AND AGRICULTURAL CREDIT. — *Colonies et Marins*, Paris, 1 November 1919.

The issuing banks of the old colonies (Martinique, Guadeloupe, French Guiana and Réunion), the agricultural credit business of which we have already mentioned (1), have recently considerably developed this business. Thus in the Martinique bank loans on harvests passed from 1,589,608 francs in 1917-18 to 2,081,121 francs in 1918-19; in the Guadeloupe bank they amounted to 2,774,950 francs in 1918-19 as against 2,475,800 francs in 1917-18.

The law of 21 March, which recently renewed the privilege of the four banks for twenty five years, placed on them an obligation to come to the aid of local agricultural credit institutions. Each of the banks of Martinique, Guadeloupe and Réunion must pay to the State, which must repay the amount to the colonies interested, a contribution of 500,000 francs which is intended to help existing local institutions of agricultural credit or those founded in the future. The bank of French Guiana will contribute 150,000 francs for the encouragement of the development of agriculture.

In addition, each of the banks must annually pay for the same purposes a sum calculated at the rate of 50 centimes for every 100 francs of the average amount by which the total circulation exceeds the amount in hand and in cash.

NORWAY.

SAVINGSBANKS' LOANS TO AGRICULTURAL SOCIETIES ON MUTUAL SECURITY. — *Meddelelser fra det Statistiske Centralbyrå*, Christiania, Nos. 4, 5 and 6, 1919.

While collecting data as to the activity of the savings-banks in 1915, 1916 and 1917, the Central Office of Statistics also obtained information as to the bank loans which these banks make to agricultural societies on mutual security (purchase, credit and similar societies). The information sought had reference to the number of societies to which individual banks had made

(1) See our issue for March 1917, pages 70-72.

loans, the membership of these societies, and the maximum loan fixed for each of them.

The savings-banks which did business of this kind numbered 89 in 1915, 93 in 1916 and 97 in 1917, and were distributed as follows among districts :

	1915	1916	1917
Östfold	18	18	20
Akershus	7	8	8
Hedmark	11	11	13
Opland	16	17	18
Buskerhud	8	8	7
Vestfold	8	10	10
Telemark	7	8	8
Ayder, Royaland and Hordaland	8	7	6
Møre and Trøndelag	3	3	5
North Norway	3	3	3
Total	89	93	97

As is seen, the larger number were in Östfold and Opland. Of all the 26 savings-banks in Östfold, 20 made bank loans to agricultural societies in 1917 ; and of the 29 in Opland 18. In Sörland and Vestland, as also in North Norway, this method of granting credit is, on the other hand, in little use ; and in the districts of Sogn and Fiordane and of Finnmark there was no case of the granting of loans of this kind during the three years in question.

About one third of the savings-banks (26 in 1915, 38 in 1916 and 32 in 1917), granted loans to a single society, while the others had relations with a number of societies varying from 2 to 10 ; three only did business with more than 10 societies, namely those of Modum, Toten and Aker which in 1917 did business with 11, 15 and 20 societies, respectively.

Altogether the number of the societies which benefited by the credit was 286 in 1915, 299 in 1916 and 310 in 1917, distributed as follows :

	1915	1916	1917
Östfold	40	39	45
Akershus	40	38	35
Hedemark	44	50	51
Opland	61	66	69
Buskerhud	37	37	35
Vestfold	33	37	40
Telemark	12	14	13
Ayder, Rogaland and Hordaland	13	11	10
Møre and Trøndelag	3	3	9
North Norway	3	4	3
Total	286	299	310

As regards the membership of the borrowing societies, 24 of them had in 1917 no more than 10 members, 78 from 11 to 20 members, 121 from 21 to 50 members, 43 from 51 to 100 members, 16 from 100 to 200 members, and 8 more than 200, two of these last having more than 300. The membership of the remaining 20 societies is not known. It is found especially in the case of the savings-banks of the territory of Östfold that societies which have recourse to their loans have a large membership.

A maximum loan has been fixed for 276 of the 310 societies to which loans were made in 1917. For 31 societies this maximum was 1000 crowns, for 48 it was between 1001 and 2000 crowns, for 78 between 2001 and 5000 crowns, for 57 between 5001 and 10,000 crowns, for 30 between 10 001 and 20,000 crowns, and for 32 above 20,000 crowns. The maximum loan is round about 60,000 crowns but in the case of some societies it reached 80,000 crowns in 1917. No limit to loans was fixed in the case of 40 societies in 1916 and 34 in 1917. Sometimes a minimum and maximum per member is fixed as well as the total maximum for the society.

There is no general rule as to the ratio of the maximum loan to membership, and thus a society with a large membership often disposes of a much limited credit while a society of few members has abundant credit.

The following table shows the total membership of all these societies in so far as it is known (that of 290 out of 310 societies), and the maximum loans fixed for these societies by the savings-banks in 1917, leaving out of account 34 societies for which no limits to loans were fixed.

	Number of societies of which the membership is known	Total membership	Number of societies for which maximum loans are fixed	Total amount of maximum loans in crowns
Ostfold	45	3,806	32	632,400
Akershus	35	962	35	259,450
Hedmark	50	1,509	51	313,330
Opland	62	2,730	69	778,475
Buskerud	35	1,259	26	177,865
Vestfold	35	831	35	188,700
Telemark	10	614	6	72,850
Ayder, Royaland and Hordaland	8	352	10	39,740
More and Trondelag	7	226	9	47,640
North Norway	3	328	3	16,500
Total	290	12,677	276	2,526,950

In judging the development of this branch of credit, it may be useful to compare the data with those of the Finance Department as to the bank

credit loans on collective security made by the savings-banks to the credit societies in 1907; and with the data as to the savings-banks' loans in 1910, collected in 1911 by a commission appointed by the Norwegian Farmers' Federation (*Norsk Landmandsforbund*). The data as to 1907 show that the savings-banks in that year lent 430,979 crowns to the credit societies on collective security. According to the enquiry of 1911 about 50 savings-banks had in 1910 relations with purchasing unions and credit societies (some 150 societies with about 4,000 members), and altogether about 950,000 crowns were granted to them as working credit for which there was collective liability. Since this time the organization of credit has, as has been seen, developed, and mainly in Östland and Opland.

URUGUAY.

LOANS FOR THE ACQUISITION OF SEED — *La Propaganda, Comercio del Salado*
Montevideo, 15 June 1914

The special method by which the Official Seed Commission of Uruguay provides opportunities for tillers of the soil to acquire seed is deserving of notice. The seed is sold for cash or for deferred payment.

When payment for it is deferred, the maximum loan to any farmer is fixed at 100 pesos; interest is payable on the loan at the rate of 5 per cent. a year; to borrowers who totally or partially repay their debt before the term fixed for repayment, interest on the sum they repay is paid at the rate of 6 per cent; and the latest date at which the debt may be repaid is 31 March 1921.

The Official Commission will, when it has received the documents necessary to affording credit, remit the seed to the borrowing farmer carriage-free.

In order to obtain this credit the farmer must bear a character which inspires confidence, must be occupied by farming, whether as landowner or tenant, and must dwell on the land which is to be sown.

Middlemen and farmers grouped in colonies, for whom the general conditions as to granting credit on security have force, are excluded from participation in this form of credit.

Part IV: Agricultural Economy in General

GERMANY.

LEGAL PROVISIONS FOUNDING SOLDIERS' HOMESTEADS IN GERMANY.

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§ I. GENERAL REMARKS.

The idea of providing homesteads for discharged soldiers, either in the form of small dwelling-houses or of land for farms, emanates in Germany from the circles of the German Land Reformers' Union (*Bund Deutscher Bodenreformer*), being due especially to this Union's gifted and praiseworthy president, Adolf Damaschke. Under his presidency on 30 March 1918 a Head Committee for Soldiers' Homesteads (*Hauptausschuss für Kriegerheimstätten*) was formed, studied soldier settlement in all its aspects, and published on the following 21st of November, in order to show the lines which a successful and methodical establishment of a system of homesteads should follow, *Grundzüge für ein Kriegerheimstättengesetz* (Fundamental Principles for a Law as to Soldiers' Homesteads). The "Principles" met with much approval from the public, so that the number of organizations adhering to the Head Committee rose between the time of the founda-

tion of this body and 17 June 1917 from 28 to 3379. The "Principles" were also often examined in the Reichstag, together with other drafts of laws on this subject, yet up to the present a general law on soldiers' homesteads has not been secured, not least, perhaps, because it did not seem easy justly to co-ordinate in laws the competencies of single States and of the Empire in the matter of land settlement. But much work has been done in the matter, and we cannot have much longer to wait for the passing of an imperial law. In the National Assembly on 21 July 1919, the Imperial Commissioner, Dr. Pruess, observed in this connection that "the bill for soldiers' homesteads has been completed in the Imperial Ministry of Justice and transmitted to the Ministry of State with a request for the speediest possible delivery of the latter's reply. So soon as this reply has been received the further preparations will be taken in hand (1)." Already two important partial laws as to soldiers' homesteads in the Empire have been enacted, the Law Providing Capital (*Kapitalabfindungsgesetz*) and the Order for Procuring Agricultural Land for Settlement (*Verordnung zur Beschaffung von landwirtschaftlichem Siedlungsland*). We will briefly describe them in the following paragraphs.

§ 3. THE LAW PROVIDING CAPITAL.

This law is dated 3 July 1916 and was completed by provisions of 26 July 1918 and 11 January 1919. It aims at giving to men who took part in the war or their widows the possibility of acquiring a homestead or continuing to hold the land they already possess, by means of a single grant of capital in lieu of a pension. In the interest of those having a right to a pension only part of such pension will be taken as a basis for making the grant of capital, so that if this capital be eventually lost the grantee will still have resources to add to his means of subsistence. The sum granted is fixed with reference to the age of the grantee, by a multiplication of the sum of the pension annually due to him: if he is 21 years old this latter sum is multiplied by 18 $\frac{1}{2}$, if he is 55 by 8 $\frac{1}{4}$. The scale fixed by the law (in § 5) lies between these two extremes.

The application of a potential pensioner for a grant of capital is decided upon by the military authorities in accordance with the results of an examination of the applicant by an official doctor, and an examination by the Central Land Authority of the use to which the proposed grant will be put, the fitness of the applicant to carry out his plan, his condition in respect to family and resources, etc. The Central Authority also sees to it that the grant is usefully employed, and informs the military authority if it be deflected from its rightful purpose. If the sum granted is not within a given interval of time expended on the determined object it is repaid (§ 7). In order to ensure the repayment the supreme military authority can require the security of a mortgage. The repayment is limited to the sum

which would have been paid if the grantee had applied for the grant of capital at the time fixed for repayment.

Up to the end of 1917, 14,090 favourable preliminary replies as to grants of capital were issued, and 4946 applications for grants were submitted after enquiry into their proposed employment, 3597 of them, covering the sum of 15 million marks in round figures, being passed.

§ 7. ORDER PROVIDING AGRICULTURAL LAND FOR SETTLEMENT

This order was issued on 29 January 1919 (1) and aims at securing on a notable scale land to be settled in homesteads by soldiers, and other sites for farms. For this purpose special associations have been founded in the various States, namely *Public Enterprises of Land Settlement* and Public Federations for Granting Land For Settlement. The Public Enterprises of Land Settlement have within their own settlement districts a right of pre-emption in the case of every conveyance of land of an area of 20 hectares or more or of part of such a piece of land. The consent of the Central Land Authority is necessary to the exercise of a similar right in the case of smaller areas (§ 1). The right of pre-emption extends to appurtenances sold with a property (§ 8). The term within which this right may be exercised is three weeks, beginning on the day on which the Land Settlement Enterprise is informed of the contents of the contract of sale (§ 7). In the case of pieces of land of an area of more than 200 hectares this term is six weeks. The right of pre-emption may not be exercised if the land in question is conveyed to a legal corporation or a relative.

Lands of the State are ceded to the Land Settlement Enterprises by lease if their retention is not necessary for public objects or reasons of national economy (§1). The land is then valued at the maximum at its producing capacity, without regard to increase of value due to war conditions. The Land Settlement Enterprise may expropriate uncultivated land and moor and waste land for purposes of settlement.

The *Federations for Granting Land for Settlement* are constituted among landowners who own 100 hectares of land or more, in settlement districts where such large properties occupy, according to the farm census of 1907, more than 13 per cent. of the cultivable area. At the request of the Land Settlement Enterprises, these federations procure at a suitable price lands fit for settlement. The duties of these federations may be entrusted by the Central Land Authority to the *Landschaften*, which are other public organizations. The federations have a right of pre-emption in all large properties in their districts, but can cede the exercise of this right to the Settlement Enterprise with the consent of the latter. The federations provide in the first place for the purchase of land of the following categories: properties acquired during the war by persons whose primary occupation is not farming; those

(1) It was accepted as law by the National Assembly on 1 July. See *Bodensystem*, 20 July 1919.

which during the last twenty years have several times changed hands, saving those bought by public corporations or near relatives of the seller (§ 6); those which are unusually extensive or which are badly farmed; those owned by persons who are absent from them for the greater part of the year and do not farm them themselves; these belonging to unusually extensive properties; and those which were previously independent peasants' holdings and have within 30 years of the time at which this order comes into force been bought up by owners of large properties (§ 16). To these conditions as to the delivery of land to the federations trustees are also subject. In every case however properties considered as model farms or which have otherwise a pre-eminent social significance are excepted from purchase.

The task of the federation is accomplished so soon as the farmed area of the large properties amounts to 10 per cent. of the whole farmed area of the settlement district (§ 13).

When a settler wholly or partially alienates his holding, gives it up, or does not constantly dwell on it or farm it, the Public Land Settlement Enterprise has the right to repurchase it. The term during which this right can be exercised, the price, etc. are fixed in the settlement contract (§ 20).

In order to procure land on lease for farm labourers permanently employed on agricultural work in a district, the rural communes and *Gutsbezirke* may be charged, on the labourers' application, to grant to them as much as 5 per cent. of the cultivable area, procuring this land for them on compulsory leases or by expropriation if it is not obtainable by any other means.

§ 4. THE HOMESTEADS LAW IN BRUNSWICK.

In the single States of the German Federation the homesteads law met with fewer difficulties than in the Empire, and therefore several of these States, Anhalt, Gotha and others, promulgated such a law in advance of the Empire. But the first and the most comprehensive homesteads law, one which regulates the foundation of homesteads on its practical as on its legal side, was promulgated in the Duchy of Brunswick on 19 April 1918. We will examine this law more closely. It comprises two laws, the Homesteads Law (*Heimstätten-gesetz*), properly so called, and the Settlement Law (*Siedlungsgesetz*) of which the next section of this article will treat. The Homesteads Law is inspired by the following principles:

Definition of homestead. — A homestead is either a lot for a dwelling (cottage and garden) or agricultural land (for a farm or market-garden). Its area varies from 0.02 hectare in the case of urban dwelling lots to 15 hectares in that of agricultural allotments (§ 2). Homesteads can be extended beyond these limits only with the consent of the Settlement Office which is commissioned by the State as the supreme authority in this matter. The legal form of homesteads is that of *Rentengüter* which give to the grantee a guaranteed right of usufruct in return for the payment of a rent which is fixed or amortizable by instalments. The rent is not capitalized and at once paid in its entirety because it is desired that the legal form of the

homesteads remain that of *Rentengüter*. Only when considerations of public economy intervene can emancipation from the payment of the rent be procured by means of a grant of capital.

Foundation of a homestead. — Homesteads are constituted by the Empire, a State, districts, towns and communes, and also by other corporations, with the consent of the Ministry of State (§ 1). The constitution follows on an entry in a land register. The legal relations between the grantor and grantee of a homestead are regulated by a written contract in which all the duties of the grantee are also stated and which is approved by the Settlement Office (§ 5).

The grantor's right of repurchase. — Homesteads may not be divided or alienated, nor can their economic independence be abrogated without the consent of the Settlement Office (§ 10). If these transactions take place, a legal and immediate right of repurchase resides in the grantor. In order that the parties may have freedom of action in this matter, the price of repurchase of a homestead is stated not in the law but in the contract founding the homestead (§ 11).

Homestead loans. — Loans on a homestead may be secured only by rights attaching to the foundation of the homestead, and may be only for the purpose of satisfying heirs, paying rates and public taxes, and responding to the demands of the military treasury for the repayment of the grant of capital. With the approval of the Settlement Office homesteads can also be mortgaged in order to provide for useful building and for other improvements.

§ 5. THE SETTLEMENT LAW.

The Settlement Law contains provisions as to measures for the constitution and development of homesteads. For this object the Settlement Office, to which we have already alluded, is constituted of five members, three of them chosen by the Ministry of State and two by the State Assembly. Its activity is regulated by the Ministry of State. As regards acquiring land for homesteads, no special legal provision has yet been made. The State intends to concede public lands for settlement and has already undertaken in this connection an enquiry into all the public lands. The financing of the whole enterprise of land settlement is practised by the State in two ways. In the first place it gives the security of its credit, in that it empowers the Settlement Office to grant a State guarantee for loans amounting to 3,000,000 marks and obtained from public corporations or individuals for the constitution of homesteads. If the legal form of homestead is not chosen, the lands must on principle remain the property of the public corporations and may only be let, on lease or otherwise. Exceptionally they may be ceded as freehold, when speculation has been excluded by special contractual disposition, and when there is question only of land on which there are at most two houses, one inhabited by the landowner himself, and garden. The State credit may guarantee as much as 90 per cent. of the

value of the soil and buildings (§ 3). In the second place State resources are employed in order that the State Bank (*Braunschweigische Leihanstalt*) may make loans, secured by the credit of the State, the district or the commune or a public settlement society, up to 90 and 75 per cent. of the value of the soil and buildings of land ceded for the foundation of homesteads. The State Bank can also act as an intermediary for the granting of unguaranteed credit. When this law was promulgated the State Assembly granted 1,000,000 marks, of which 500,000 marks were the State's contribution to the foundation of a new public settlement society, and 200,000 marks were a reserve fund guaranteeing the mortgage credit of which we have spoken, while 300,000 marks were intended to develop land settlement.

SPAIN.

THE REORGANIZATION OF THE INSTITUTE OF SOCIAL REFORM.

SOURCE:

RURAL DECRETO REORGANIZANDO LOS SERVICIOS TÉCNICO-ADMINISTRATIVOS DEL INSTITUTO DE REFORMAS SOCIALES EN LA FORMA QUE SE INDICA Y MARCANDO LAS NORMAS POR LAS QUE HA DE REGIRSE EN SU NUEVA ORGANIZACIÓN. — *Gaceta de Madrid*, Madrid, 15 October 1919

On another occasion (1) we explained the first organization of the Institute of Social Reform when in 1903, by a decree of 23 April, it was evolved as the new form of the former Commission of Social Reform in the Ministry of the Interior. The work which this Institute accomplished after that date, also analysed by us, proves its usefulness and activity. It may in fact be said that from this Institute have emanated the drafts, if not the actual text, of all legislative provisions of a social character which have been promulgated in Spain during the last fifteen years, and of which a large proportion refer to rural matters, like the law and the regulation dealing with agricultural syndicates, the law as to the *pósitos*, etc. Some very important bills due to this Institute's work still await the Spanish Parliament's vote, those referring to the amendment of the law on the accidents of labour and its extension to agriculture, the legislation as to the popular form of life insurance, the labour contract, etc. One side of the Institute's work which makes little show is so important as to be worthy of the highest praise, the work namely which has since the Institute's foun-

(1) See our issue (*Monthly Bulletin of Economic and Social Intelligence*) for May 1913

dation been daily accomplished by each of its sections, both propaganda work and the inspection of the conditions in which the labour legislation in force in the peninsula is applied. The Institute's library, which is exclusively made up of specialized technical works, now comprises more than 30,000 volumes. In speaking of the Institute's praiseworthy accomplishment mention should not be omitted of its initiative in setting on foot and its perseverance in accomplishing enquiries no less important than those which concerned the statistics of associations, average prices, strikes, etc., and the more recent investigations and studies, undertaken by its central administration, into the emigration of labourers to France during the late war and the agrarian problem in Andalusia.

In spite, however, of all these services, we must, like the royal decree which supplies the occasion of this paper, frankly acknowledge that the Institute of Social Reform, as a corporation, "suffers from a certain interim character which in a large measure detracts from its initiative". This position is, as the decree says, partly due to the question connected with the election of those representatives of social classes who are responsible for directing the Institute, and also to its constitution and internal organization. In order to get rid of the difficulties to which this situation gives rise, the present reorganization, which we will presently describe in its main lines, has taken place. It was also necessary, in order to complete the corporate organization to which the spirit of the present reform corresponds, to interest in, and to penetrate with, this work all the social and productive elements which in the various provinces and districts of the country constitute the integral parts of the whole social problem. Hitherto the Institute of Social Reform had known these elements and made a business of knowing them by means of the Labour Inspectors and Statistical Delegations. It is moreover certain that, owing to the absence of certain determined elements, notably the employing class, the Institute of Social Reform lacks the speed and pliability which would, together with the mutual confidence and dependence of capital and labour, bring it daily and continually into touch with all the productive forces of every district and all currents making themselves felt. It has therefore been thought necessary to introduce into the law enacting the measure of reorganization we are examining provisions which, as we shall see, make rules for the gradual constitution of District Institutes of Social Reform, as these are considered to be necessary and as the public interest calls for them. They are endowed with an autonomy which should guarantee their efficacy in view of the facts that the conditions of labour and of collective life are very different in different districts of Spain, and that it would therefore be absurd to make the same rules of a social character for all of them.

We will now see what are the chief provisions of the Royal Decree of 15 October 1919.

. § I. SPECIAL FUNCTION AND COMPOSITION OF THE INSTITUTE OF SOCIAL REFORM.

As newly organized, the Institute of Social Reform is the official body responsible for making investigations with a view to the proposal, execu-

tion and circulation of legislative provisions having reference to economic social problems in the widest sense, and is very specially the government consultative body where labour legislation and social action are concerned.

The study and research connected with labour conditions in Spain and abroad, as a factor of production and in their relations with capital, devolve on the Institute. On this subject it obtains the information desired. It must prepare the elements of science and of fact which contribute to the drafting of social and labour legislation, must draft bills and legal provisions on its own initiative or at the government's request, must provide, by inspection and by maintaining adequate relations with authorities, for the execution of provisions which have received the sanction, and must bring about by all available means a wide knowledge and an exact comprehension of social measures in force, must study the manner in which, when applied, they effect the reforms advised by experience, must make the statistical records necessary or helpful to the discharge of its mission, and must fulfil all duties imposed on it by the laws in force and the laws passed in the future. The Institute must also encourage social and government action in favour of the improvement of the conditions of the neediest classes and their welfare, must study and advance the corporate, trade and mutual aid organizations of these classes, and must thus succeed in lessening the irregular conditions of labour, finding for these the required legal and humanitarian solution.

The Institute of Social Reform will depend on the Ministry of the Interior and will act permanently as a consultative body to the various ministries.

The Institute of Social Reform is made up of the following agencies:

1. The Institute in its corporate capacity (Permanent Committee);
2. The General Secretariat;
3. The general directing bodies of its services;
4. The Directing Council—inspectors, delegates and correspondents holding office according to forms determined by the Royal Decree.

§ 2. THE PERMANENT COMMITTEE.

The Permanent Committee includes 60 members having the right to a vote: (1) twelve chosen freely by the government; (2) sixteen nominated, at the Institute's request, by the institutions it elects to call upon to take part in its work; (3) sixteen representing the employing element; and (4) sixteen representing the labouring element. The members of the two last-named categories are elected.

In special cases the Institute of Social Reform will be allowed to incorporate in its Permanent Committee, as temporary members, a certain number of persons who may state their opinions, but may not vote except in the case of certain questions in the case of which they will be looked upon as co-opted members having a vote.

The Senate and the Assembly of Deputies will, first of all, be represented by one voting member each, as will the National Institute of Thrift and the Royal Academies of Medicine, Moral and Political Sciences, Jurisprudence and Legislation.

For the election of the representatives of employers and workers, trade groups of industry and labour, including agriculture and commerce, will be formed.

The members representing employers will be elected by the various employers' trade associations, who will each choose two members and deputies for these. The labour members and their deputies will be elected by the same procedure.

Women will be electors and be eligible for all the Institute's offices.

The office of elected member of the Institute of Social Reform will be held for four years, in the case both of the actual members and of their deputies. A deputy will not only replace the member for whom he deputizes in the latter's absence, but will also in the case of his death or resignation finally occupy his place until his mandate expires. Deputies may be present at meetings of the Permanent Committee but may not express opinions or vote at them.

§ 3. THE DIRECTING COUNCIL.

The object of the Institute's Directing Council is co-operation with the president in his duties which belong to the Institute's special active administration, and, by the Permanent Committee's delegation, co-operation in consultative duties and the duties of preparing legislation. The Directing Council is made up of a president, who is also president of the Institute, and of eight members having a vote of whom one is chosen by the Government nominees on the Permanent Committee, one by the members who represent scientific and non-trade organizations, three by the employers' representatives and three by the representatives of labour. The Institute's two vice-presidents will also belong to the Council.

The Directing Council will be renewed annually. Members whose mandate has expired are eligible for re-election. They will continue to hold office until they are replaced.

§ 4. GENERAL ORGANIZATION OF SERVICES.

The following technical administrative services will form part of the General Direction of Legislation and Social Action: (1) Legislation and Publicity; (2) Education and Social Action; (3) Law; (4) Association; (5) Agrarian Sociology.

The Legislation and Publicity Section will be charged to study the movement of home and foreign legislation; to prepare the bills recommended by the Institute; to do propaganda work and to do the Institute's press work; to organize and direct the staff of correspondents; to look after relations with foreign countries; to be represented in sociological meetings

and congresses; and to prepare international agreements, lectures and treaties.

The Education and Social Action Section will be responsible for the library of the Institute of Social Reform, the department of bibliography and social archives, the study of legislative information and of the Spanish and foreign social movement, the development of social activity and education by organizing courses, lessons, lectures, publications etc., the campaign against and prophylactic treatment of social diseases; the technical re-education of the disabled, and the editorship of the Institute's bulletin.

The Law Section will be charged to collect and study home and foreign law and to act as legal assessor of social action and legislation. It will issue judgements, and will be responsible for legal consultations outside the special competency of other sections; it will give instructions as to applications to the Institute involving legislative proposals or reforms, and will inform itself in every case as to the legal character of labour and apprenticeship contracts.

The Associations Section will have the following in its province: association generally, syndicalism, thrift association in its relations to the National Institute of Thrift, corporate trade organization, social pensions, co-operation, consumers' leagues, mutuality and the system of equality.

The Section of Agrarian Sociology will be concerned with the study of the system of property, land tenure and the letting of lands in Spain, from the point of view of large, medium-sized and small holdings, and also with other problems of a legal character as they are connected with these subjects and are applicable to the subdivision and consolidation of properties; and the decrease and increase of the rural population with a view to making stable the distribution of the working classes among trades. This section will also study the question of rural labour, especially of family labour, and the question of constituting complementary associated groups representing the productive, economic and social forces of farmers.

In order to aid the Direction of Legislation and Social Action in its research and studies, a staff of correspondents will be employed on its proposal, for which reasons are duly assigned, in the districts or provinces of Spain and in the foreign capitals where their services are required.

The technical administrative sections depending on the Direction of Labour and Inspection are the following (1) Section of Permanent Statistics of Production and Labour; (2) Section of Social Inspection and Experiment; (3) Legal Assessorate; (4) Cheap Dwellings Section; (5) Section for Irregular Labour Conditions.

The Section of Permanent Statistics of Production and Labour is responsible for obtaining general information and statistics as to the constant facts or the regular conditions of labour in Spain and abroad, and especially the information and statistics which lead to a knowledge, by districts and industries, of the importance and the economic strength of production and the geographical distribution of labour and labourers, of the labourer's life and conditions, of those of the other classes of Society

which most need social protection, and of data with regard to the market for labour, food, primary material and the like.

The Inspection Section will have competence wherever there is question of applying and executing the laws and provisions in force, with the aid of the staff depending on this section. It will also have to study and propose the measures of sanitation and security rendered necessary by the well known dangers of industrial life.

The Legal Assessorate will decide on questions as to which it is consulted and give opinions as to the application of provisions in force; will study doubtful problems and questions arising out of the execution of these provisions; will interpret them; will manage a free department of general consultation, and will do the work of the director's secretariat.

The Cheap Dwellings Section must make known and apply the law of 12 June 1911, including its complementary rules and provisions, must promote co-operative societies for building healthy dwellings cheaply, must study the housing problems in the various populated centres, and must develop the various forms of credit intended for garden-cities, workmen's gardens, and all institutions connected with the housing problem.

The Section for Irregular Labour Conditions must investigate social disturbances, with a view to preventing them, lessening their economic, moral and technical effects, and arriving at a legal and humane solution of difficulties and one consonant with the mission of the Institute of Social Reform. With this object the section will be competent to take action in the matter of strikes, inevitable lock-outs, proposals for mediation, conciliation and arbitration, and other forms of social pacification.

Dependent on the Direction of Labour and Inspection and as aids to the discharge of the special functions of sections, there will be the inspectors of labour and statistical delegates, whose duties, like those of the Council of Social Reform, will be specially regulated where they come into relations with the Institute.

This Institute will, with the co-operation of the various sections, organize a social museum to stimulate social action and to give teaching as to, and take preventive measures against, the risks of labour.

The General Secretariat will be responsible for the general course of the business of the Permanent Committee, the Directing Council and the various directing bodies, and of the Institute's administrative centre. The Institute's General Secretary will be secretary to the Permanent Committee and the Council and will be able to vote on questions within the competence of his office.

§ 5. THE DISTRICT INSTITUTES OF SOCIAL REFORM.

The Government will be able on its own initiative or on application from the Institute, to establish in determined local capitals District Institutes of Social Reform, having the measure of autonomy demanded by the varying intensity of the efforts of the local public authorities for social reform. These District Institutes will be concerned with the activity of

economic life and with education, traditions, and local characteristics in their respective districts, and the necessity there may be for accelerating the harmonizing, by appropriate means, of the relations between the various factors of production.

The Government will, by a special provision, determine the districts in which these Institutes are to be established, the rules of their constitutions, their means of activity, and the character of their relations with the Central Institute.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

FRANCE

1. THE ESTABLISHMENT OF CHAMBERS OF AGRICULTURE. — Law of 25 October 1919 establishing and organizing Chambers of Agriculture, *Journal Officiel*, 29 October 1919.

A very important law of 25 October 1919 has at last solved the question of Chambers of Agriculture which has been before Parliament for many years.

By the terms of this law the Chambers of Agriculture will be departmental, but they will have the right to remain independent, to act in concert with each other within districts, and even to form themselves into District Chambers. In this last case the former Departmental Chambers will simply become Departmental Agricultural Committees.

They will be composed: (1) of members elected by scrutiny of lists and by *arrondissements*, whose number will be equal to that of the cantons in the department, and (2) of delegates of those agricultural societies and syndicates in each department which have been constituted for ten years and really receive subscriptions from their members, the number of these delegates to be equal to that of the *arrondissements*.

The mandate of the members of a chamber will be for six years and half their number will be renewable every three years. The electors will include: (1) farming landowners, rent paying tenants and *métayers*; (2) agricultural labourers who have practised their trade for at least three years and are living in the commune when the lists of electors are made up; (3) landowners not farming their land who have held it for at least three years; (4) former farmers who have farmed for at least nine years; (5) teachers of agriculture.

Women who possess any of these sets of qualifications will be allowed to vote.

In order to have a vote or be eligible for election it is necessary to be French, to enjoy civil and political rights, and to be fully twenty-five years of age.

The Chambers will meet twice a year, in May and December, and no session may last more than eight days. The prefect will have the right of entry to meetings, and may cause himself to be represented by the Director of Agricultural Services.

A Chamber will have the right to co-opt members, who will have a consultative voice, at the rate of two a canton.

The Chambers will be consulted compulsorily as to the provision of the various kinds of agricultural instruction and as to fairs and markets, bills touching agricultural interests, the establishment of district credit banks, and all questions connected with agriculture.

They will inform the Minister as to the agricultural position.

The Chambers will be recognized as public establishments: they will in consequence, be able to acquire, own, borrow and alienate property, after receiving authorization.

They will have the right to form or assist establishments, institutions and services of use to agriculture, such as credit banks, courses of instruction, schools, courses of instruction in domestic economy, to set up collective enterprises of every kind, to carry out every kind of enterprise of interest to agriculture and public work, and to administer agricultural establishments founded by collective or individual initiative.

No one may carry on deforestation without the authorization of the local Chambers of Agriculture.

The Chambers of Agriculture will inspect the weights of merchandise, weighing machines and the quality of manures and seed, will be able to prosecute those who falsify or adulterate agricultural produce and its derivatives and agricultural requisites, as well as those who illegally influence the market for these articles.

They will authorize the keeping of stud animals and have the right of inspecting them.

They will advise and arbitrate as between agriculture and trade or industry and as between the various classes of persons who are their electors.

They will draw up: an ordinary budget, approved by the prefect, and communicated to the Minister of Agriculture; and special budgets approved by the Minister of Agriculture.

They may organize all kinds of insurance against risks of all kinds, those of live stock, fire, hail, sickness, unemployment, the accidents of work.

They will have the right to organize the placing of agricultural labour, to set up local and departmental labour bureaux and a national office of the kind, to institute committees to arbitrate between employers and workers, and to found schools of apprenticeship for specialized workmen.

They will have facilities for encouraging or undertaking the construction of canals for watering land and rural electric light systems.

The auditing of the books of the Chambers of Agriculture will be a duty of the Minister of Agriculture, who will act through the agents of his department or through financial inspectors.

If legal enactments are violated, a Chamber may be dissolved by a decree passed in the Council of Ministers.

Article 52 of the law deals with District Chambers of Agriculture. These will be made up of all or some of the members of Departmental Agricultural Committees, according to the clauses of the federating agreement into which the Departmental Chambers entered before they were transformed. The District Chambers may form or assist or maintain establishments and services working in the common interest, provided they obtain ministerial authorization. They may issue collective loans.

They may adopt the system of a single budget or may leave all or part of their budgets to the care of the Departmental Agricultural Committees.

The prerogatives granted to the Chambers of Agriculture hold good for the Departmental Agricultural Committees except in so far as these have delegated rights to the District Chambers.

Their rules will be drawn up by the District Chambers in accordance with the provisions of the law and of the agreement to federate. They will be communicated to the Minister of Agriculture.

The same rules as to elections will obtain for the Departmental Committees as for the Departmental Chambers.

The Departmental Agricultural Committees will meet four times a year, in particular in May and December. They may be summoned to an extraordinary meeting in order to nominate delegates for the District Chambers.

The Chambers of Agriculture may meet in sections for the several *arrondissements*. The duties and rights of these sections will be established by the District Chambers or Departmental Committees. The section will include the members elected by the *arrondissements*. They may meet as regular or as extraordinary sections. The sub-prefect will have the right to be present at their meetings.

We should add that the members of the Agricultural Offices, of which we announced the foundation (1), will be appointed by the Chambers of Agriculture before the expiry of the mandate of the members now in office.

The new law has been very well received by those it concerns, and the Central Union of the Farmers' Syndicates of France (*Union centrale des Syndicats d'Agriculture de France*) has not hesitated to state in its bulletin for October 1919 that "the provisions satisfy us on all essential points."

(1) See our issue for June-July 1919, page 426.

2. NEW MEASURES FACILITATING THE ACQUISITION OF SMALL HOLDINGS. — Law of 31 October 1919 authorizing departments and communes to acquire rural land and estates, to divide them into lots and to resell them, with a view to facilitating the acquisition of small holdings by labourers and persons of narrow means *Journal Officiel*, 1 November 1919.

In order to facilitate the acquisition of small holdings by labourers and persons of narrow means, a law of 31 October 1919 has authorized departments and communes to acquire rural lands and estates and resell them after dividing them into lots.

The lots must be as follows :

- (1) If they are intended to provide the site of a family dwelling and a garden their area must not exceed 10 ares ;
- (2) If they are intended to form a small farm their value must not exceed 10,000 francs, whatever be their area.

The character of applicants and the number of their children are taken into account when lots are conceded, and they are given by preference to persons who have procured, in order to pay for them, a long-term loan either from a land-credit society or from a district agricultural credit bank.

The price asked by the department or commune should be so calculated that neither profit nor loss accrues to such body, and it should be paid in cash.

The land acquired is held on the following conditions : it cannot be alienated for ten years ; if it is bought as the site of a family dwelling it may not be used for any other purpose ; if it is bought as a small farm the purchaser must engage to cultivate it by himself or with the help of the members of his family.

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3. THE ROLE OF THE STATE IN THE UTILIZATION OF ELECTRIC ENERGY FOR AGRICULTURE. — Ministerial circular of 19 October 1919 in the *Journal Officiel* of 11 November 1919.

The agricultural uses of electric power are numerous, whether it be a case of electric motor tillage, work done on the farm, the working of agricultural produce outside the farm by co-operative societies (threshing, butter-making, cheesemaking, winemaking, distilling from wine-dregs, milling, etc.), pumping for irrigation and sanitation, or rural industries. Moreover light is as necessary to peasants as motive power and should be looked upon as a real instrument for work.

The groups of persons who can at present undertake to distribute

electric power are the agricultural co-operative societies, the syndical associations, the communes and the concessionaries distributing electric power.

The State grants to the agricultural co-operative societies, through the medium of the local and district agricultural credit banks, a long-term advance repayable in five years, bearing interest at the rate of 2 per cent., and equal in amount to half the subscribed capital. The State also has the technical plan for the electric power systems drawn up at its cost, by the rural engineering department, and makes a grant of which the amount is deducted from that of the advance and which may not exceed one sixth of the costs of installation.

A society distributing electric power ensures the distribution and sale thereof to its members at a price which allows it to pay, in addition to the general costs of the undertaking, interest on members' shares at the rate fixed by the rules, and to constitute a sinking fund with which to pay back the State loan. If the business yield a balance of profit this can be shared by the co-operative societies, in proportion to their individual consumption. If such balance become permanent the price of the power can be lowered.

Four co-operative systems of electric power are now at work, at Roisel (Somme), Prouvay-Rosay (Eure), Vaucogne (Aube) and Saint-Ouen (Marne), and a fifth is in course of construction in Le Forez. It should be noticed that all these co-operative societies include larger or smaller agglomerations of communes, and that their receipts are importantly swelled by customers outside the farming class.

The co-operative form is used with a view to founding not only a distributing system but also a business, and therefore it must conform to the law on societies. But exactly as an isolated landowner, who lives at some distance from the existing distributing system and wishes to buy power from it, is generally obliged, by the concessionaries, to make at his own cost the connection which will bring the power to his home, so a larger or smaller number of farmers may wish to unite in order to bring the power of an existing system to their farms at their joint cost, and may not dream of a joint management of the distribution of the power, an undertaking which would certainly be onerous if its limits were too narrow. An enterprise of this kind can be carried on by a syndical association constituted according to the law of 21 January 1865 and 28 December 1888, whenever the distribution of electric power is such that it can be looked upon as intended for the increase of a fund which must pertain to the association. The intervention of these groupings would be particularly feasible when there was question of using electric power for pumping connected with irrigation or sanitation and, in general, for every future improvement to be carried out by farmers individually. Hitherto connections specially constructed by syndical associations with a view to the distribution of electric power have been rare, and yet there is a vast and interesting field on which use might be made of them, wherever there already are systems to which connections for the use of agriculture might be made. The advantages granted by the State to syndical associations for the execution of the works which are their object may consist in the free examination

of the technical plan, and in the awarding of grants, varying with circumstances, and amounting if necessary to half the outlay when the cost of the undertaking is obviously beyond the means of those concerned.

When the case is one of supplying the needs not of a group of farmers only but also of a centre of population, the commune or the associated communes can play an important part in constructing rural systems. Sometimes they will be able to make use of a small waterfall for local needs and manage it directly or through the medium of a concessionary. Sometimes they can part with their riverine rights to hydro-electric industries which instal themselves on their territory, making their supply of electric power a condition of the bargain. Sometimes, again, they can connect themselves with an existing system, receiving from it certain advantages in return. Here again these installations are helped by the Ministry of Agriculture, and rules admitted in the case of syndical associations can be applied.

The construction of rural systems for the distribution of electric power can be accomplished, finally, in agreement with the existing concessionaries, who can be asked to extend their connections beyond towns and villages. In the case of these, however, it would often be necessary to presuppose State grants for working or installation expenses. The help given by the Ministry of Agriculture is limited to the specially agricultural part of the systems.

FRENCH PROTECTORATE OF MOROCCO.

OFFICIAL COLONIZATION IN 1919. — *Bulletin officiel*, Rabat, 23 June 1919.

The cessions of State lands to colonists who wished to form small farms covered in 1919 small, medium-sized and large settlers' lots, their area varying with the amount of capital necessary to realizing their value. Their total area was more than 12,000 hectares.

Settlement of Small and Suburban Lots. — In order that the economic life of agricultural groupings may become normal the accessory industries of farms must be developed. Suburban land settlement aims at forming, round centres of population, small farms which benefit by the nearness of a market permanently open to the produce of the accessory crops and industries of farming (vegetables and fruit, the produce of poultry-yards, dairies and bees, etc.). On the lots reserved for these small farms the artisans whose collaboration is indispensable to colonists will also settle — smiths, wheelwrights, joiners, carpenters, masons, etc. — will benefit by the privileged position of these lots, and will find in cultivating them secondary sources of gain which they will add to what they earn by their trades, to the advancement of their success.

Six small settlers' lots were provided for by the colonization programme of 1919. They varied in area from 18 to 30 hectares. They were offered

for sale, the applicants drawing lots for them. Their price was payable in annual instalments, and the purchasers were bound, in accordance with a book of terms which pertained to each lot, to incur certain obligations with regard to realizing their value. The clauses of the agreements which took this special position into account were such that eventually they might be accompanied by restrictions and obligations imposed by the neighbourhood of a centre of population.

Settlement of Medium-sized Lots. — With a view to encouraging settlement by colonists who have the means necessary to building up a farm but whose capital is limited, and who are not able to spend on the negotiations for purchase from natives the long period of time that business generally requires, the administration of the Protectorate has decided to reserve for medium-sized colonization those State properties which lend themselves, in virtue of the nature of their soil and their situation, to direct cultivation by colonists.

These properties are divided into lots varying in area from 200 to 400 hectares, and are as far as possible grouped about a centre which will, gradually and as needs arise, be provided with the equipment indispensable to development and management.

The lots will be sold at their real value which a committee of valuers, composed of officials and colonists, will fix. The purchasers will be obliged to realize the value of their lands and to erect on them farm buildings suitable to their importance. In return they will be allowed to pay off the purchase-price in ten equal and consecutive annual instalments.

If the value of a farm of 300 hectares, mainly given up to grain growing and live stock, is to be realized, a professional farmer, farming it himself, must dispose of a minimum sum of some 50,000 francs.

The persons to whom the farms are allotted are chosen by lot from those whose technical qualifications and financial resources are judged by the administration to be sufficient, and who fulfil the following conditions:

They must be of age and must enjoy civil and political rights;

They must not own in Morocco property of an area exceeding that of the medium-sized farm in question;

They must engage themselves to settle on the property sold to them within a year of the date of the sale, or failing this to settle within the same interval of time in a colonist's farm.

Applicants who engage themselves to settle on the land will enjoy priority at the drawing of lots.

Twenty-five per cent. of the lots of land are reserved for men disabled in the war; 50 per cent. for colonists who have been settled in Morocco for two years and have not been able to acquire agricultural interests there; and twenty-five per cent. for other applicants.

The total area which was capable of being ceded in 1919 for colonization in medium-sized lots was about 8,855 hectares.

Settlement of Large Lots. — The State properties reserved for large colonization are those which, owing to their situation, their nature or their unfitness for subdivision, need large capital. They are sold by limited auc-

tion with a secret reserve price ; no one is allowed to bid who cannot prove that he has the technical qualifications and financial resources necessary to carrying out, within the determined intervals of time, the clauses of the agreement which regard to realization of the value of the land.

Two State properties, measuring 1,106 hectares and 707 hectares, respectively, were ceded for large colonization in 1919.

GREAT BRITAIN AND IRELAND.

THE RURAL DEVELOPMENT BRANCH OF THE MINISTRY OF RECONSTRUCTION.

— Report of the Ministry of Reconstruction for the period ended 31st December 1918. London, 1919.

The work in relation to agriculture of the Ministry of Reconstruction, which was constituted in 1917, is dealt with by a Rural Development Branch. The Branch has co-operated closely with the Department of Agriculture and other departments concerned.

Special attention has been given by the Branch to the question of a suitable administrative machinery for carrying out any permanent policy which may be decided upon for increasing the home production of food supplies, on the assumption that the State will continue to exercise some measure of supervision over the operations necessary to this end.

Many of the specific schemes recommended in the second part of the Report of the Agricultural Policy Sub-Committee (1) have been worked out by the Rural Development Branch in consultation with the Board of Agriculture, or proposals have been submitted to the Board of Agriculture for consideration. In other cases, memoranda have been prepared and further information has been collected.

The question of tithe redemption was dealt with in the Tithe Act, 1918, which was introduced by the Board of Agriculture after consultation with the Ministry of Reconstruction. As the result of a joint memorandum by the President of the Board of Agriculture and the Ministry of Reconstruction, the Government have introduced a Bill to amend the Small Holdings and Allotments Acts ; it provides, amongst other changes, for facilitating the acquisition of land for small holdings by payment of annuities.

A large amount of material has been collected by the Rural Development Branch on the general question of village reconstruction and a scheme has been recommended on lines for increasing the amenities of village life. The question of stimulating and developing rural industries has been made the subject of full and detailed investigation in various parts of the country.

Various schemes for the development of rural transport facilities have been worked out. In particular attention has been devoted to the pos-

(1) A summary of this report appeared in our issue of July 1918.

sibility of developing, a comprehensive system of narrow-gauge railways in rural areas. In this connection advantage has been taken of the experience gained during the war in utilizing narrow gauge railways in the zone of active operations. Proposals have been submitted to the Board of Trade for the establishment of a central authority to deal with the matter.

An Interim Forestry Authority has been set up and a sum of £100,000 has been voted by Parliament for the commencement of immediate operations, in preparation for a comprehensive scheme of afforestation for which legislative powers will be sought in due course.

Immediately on the formation of the Ministry of Reconstruction, attention was devoted to the question of making provision for the settlement of ex-service men on the land. In May 1918, as the result of joint deliberations by the Ministry of Reconstruction and the Board of Agriculture, it was proposed that power should immediately be obtained for the acquisition (by compulsion if necessary) of large areas of land. A Small Holdings and Allotments Bill with this object was introduced into Parliament, but the sudden developments in the military situation made it necessary to acquire land more rapidly than would have been possible under the provisions of the Bill. Revised proposals have accordingly been prepared, and accepted by the Government, for the immediate provision of a capital sum calculated to meet all requirements (as regards both land acquisition, and equipment and training) for the settlement of ex-service men.

Steps were also taken to consider suitable methods for making rural life attractive to ex-service men. The Minister of Reconstruction is assisted by an Advisory Council, divided into sections, and one of these sections was asked to report upon the question. The section made a variety of recommendations which (apart from the acquisition of land for small holdings) embraced increased facilities for rural housing, provision for the training of officers and men desirous of taking up an agricultural life, improved organization for agricultural trade purposes and provision for increased amenities of village life. In particular they recommended the immediate establishment of a Central Executive Committee, including representatives of the various departments and organizations specially interested in the different aspects of the problem of settling ex-service men on the land.

The same section of the Advisory Council were also asked, early in 1918, to consider a scheme drawn up by the Rural Development Branch for the establishment of "rural information offices" to centralize at suitable places in each locality the provision of any information available from official sources that might be of interest or value to the local agricultural community. The section recommended that the scheme should be set in motion experimentally by the Board of Agriculture at certain selected centres.

Sub-committees of the section were appointed to consider what economic part women could take in the development of agriculture and what steps should be taken to give practical effect to such conclusions as might be drawn. One of these sub-committees will deal with this question as regards

conditions obtaining in England and Wales, and the other as regards conditions obtaining in Scotland.

The Rural Development Branch has also had under consideration general questions of land reform, such as the acquisition of land for public purposes, registration of title, taxation of land values, and the like.

ROUMANIA.

THE NEW AGRARIAN REFORM. — *The Near East*, Vol. XV, No. 408, London, 28 February 1919; MICHEL (Bernard): "La question agraire en Roumanie", in *La Réforme Sociale*, Paris, 1-16 June 1919.

We have already described in this review (1) the reforms undertaken by the Roumanian government after the peasants' revolt of 1907. These reforms can be resumed as follows:

(1) Rules were laid down for the regulation of leases and agricultural inspectors were appointed to see that these rules were applied.

(2) The area which could be let to a single tenant was limited and the constitution of tenants' trusts was forbidden.

(3) The State and corporations were obliged to let their lands to peasants directly, without the intervention of middlemen.

(5) The State was to participate officially in the institution of co-operative societies and in the formation of a rural bank which would acquire the large properties of the State and private owners, subdivide them, and resell them to the peasants.

Although the results obtained by these reforms have been satisfactory, the rapid transformation of conditions of life in Roumania very soon pushed the government to take a further step in advance. As early as 1913, when an appeal was made to the people for the Balkan war, but more especially in 1916, when the country was entering on a war which demanded larger sacrifices from the lower classes, the government promised to adopt more radical measures. Such is the object of the law of 15-28 December 1918 which brings about a complete redistribution of property in land. Its fundamental principles are the following:

(1) In order that large properties may be abolished and medium-sized properties may at the same time be safeguarded, no expropriations are made on holdings of less than 100 hectares, and on holdings of between 100 and 10,000 hectares expropriations are in inverse ratio to area. Only one hectare is expropriated on a holding of 100 hectares, that is 1 per cent. of area. On a holding of 200 hectares 35 hectares are expropriated or 15 per cent. of area, on one of 500 hectares 260 hectares or a little more than half. But on a holding of 9,000 hectares 8,520 hectares are expropriated, and on holdings of 10,000 hectares and more the area in excess of 500 hectares is all expropriated. The scale of expropriation provided by the law covers

(1) See our issue (*Monthly Bulletin of Economic and Social Intelligence*) for May 1914, pages 120-134.

some hundred cases, the areas expropriated rising by 5 hectares and the properties dealt with varying from 100 to 10,000 hectares in extent.

This scale is applicable only to private property. The property of the State and of corporations is wholly expropriated in the case of cultivated land. Forest and lands which have a special value, such as ponds, experimental farms, etc., are not covered by the law. Lands belonging to absentees and foreigners are also wholly expropriated. Private property in land on which petrol is found may subsist if the owners hold no more than 12,000 hectares, but these owners must cede in exchange for their petroliferous land an equivalent area of cultivated land, and may in no case possess more than 12,000 hectares.

(2) The land is granted to the peasants. It will be distributed in the first place to those who have served in the war, then to the heirs of those who died while on service, and lastly to other peasants. The law which will determine the details of the procedure for this new distribution has not yet appeared, but in order to avoid delay the law of 28 December 1918 provides that from the spring of 1919 onwards the expropriated lands will be consigned to the whole body of peasants in each village, who will form co-operative societies for the provisional cultivation of the lands they receive.

(3) The price of the expropriated land is fixed, by the mixed commissions formed of representatives of the landowners, the peasants and the government, on the basis of the average local market-price of land from 1911 to 1915. The price may not exceed the amount of twenty years' rent. The price is to be paid to private owners in 5 per cent. annuities determinable in fifty years, and to corporations in perpetual annuities. The interest and amortization of this purchase money is to be met from a special fund of which two thirds will be contributed by the peasants and one third by the State. In other words, one third of the burden of expropriation is borne by the State.

The procedure for the execution of the law is distinguished by rapidity and by the exclusion of ordinary judicial authorities. The first phase consists in the constitution of local commissions of three members, namely a justice of the peace, a peasants' delegate and the landlord or his representative. This commission examines on the spot the land to be expropriated. If the three members agree, the land is at once granted to the peasants who group themselves in a co-operative society in order to farm it. If the members of the commission disagree, there is appeal to a departmental commission composed of two peasants' delegates, two delegates of the landowners of the department, a judge who is chairman, and a representative of the Central Bank of Co-operation. The period during which appeals are allowable is one month and the decision must be made within five days.

Pending the decision, which is made without a visit to the land in question, the land is consigned to the peasants. But this grant is only provisional: before it becomes final the commission must visit the land and determine the areas to be expropriated and their boundaries. From this final step there is appeal to a regional commission, composed like the depart-

mental commission except that its chairman is the president of the Court of Appeal. From the decision of the regional commission there is no appeal, not even to the Court of Cassation on the ground of a formal error.

Finally, in order that the peasants may be faced with a clear position and violations of the law may be avoided, the law provides that all burdens and charges attaching to a holding become void from the time when it is granted to the peasants. Creditors must make claims on the price fixed for the land by the commissions for as much as is due to them. No title to an annuity is to be ceded to any expropriated landowner until the land in question has been completely emancipated from charges.

The law is to extend to Bessarabia where the following estates are to be expropriated in their entirety: — Crown and State properties; land belonging to the Peasants' Bank and foreign monasteries; land belonging to the former Zemstvos and to public and private ecclesiastical bodies; cultivable land belonging to the municipalities; land owned by foreigners; land belonging to local monasteries, save for half a hectare per monk; and land belonging to churches, save for a portion for the use of the officiating priest; furthermore, one other category, all land which has been leased out for successive periods of five years from 1905-1918 — i. e., held as an investment. For the rest, the regulations are much the same as for Roumania.

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(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (1; heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 øre) (Denmark, Norway, Sweden)	=	1s. 1 ¹ / ₈ d.	at par
1 Declatine (2 tcherwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Fed'lan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1s. 7 53/64 d.	at par
1 Franc (100 centimes) (France,	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	983/64 d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 litre	=	0.21998	gallons
1 Mark (100 Pfennige) (Germany)	=	0.0275	bushels
1 Mark (100 penni) (Finland)	=	11 3/4 d.	at par
1 Metre	=	933/64 d.	at par
1 Milreis, gold (Brazil)	=	3.28084	leet
1 Milreis, gold (Portugal)	=	2s. 2 ¹ / ₂ d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	4s. 5 19/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	933/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	3s. 11 37/64 d.	at par
1 Pund (Sweden)	=	18s. 0 15/64 d.	at par
1 Quintal	=	0.93712	lbs.
1 Rouble, gold (100 kopeks) (Russia)	=	1.96843	cwis.
1 Rupee, silver (16 annas) (British India)	=	2s. 1 3/8 d.	at par
1 Talari (20 piastre) (Egypt)	=	1s. 6 d.	at par
1 Verst (Russia)	=	4s. 1 1/32 d.	at par
1 Yen, gold (2 fun or 100 sen) (Japan)	=	1166.64479	yards
1 Zentner (Germany)	=	2s. 037/64 d.	at par
	=	117.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

FRANCE.

CO-OPERATIVE AGRICULTURAL CREDIT AT THE END
OF THE WAR.

SOURCE (OFFICIAL)

CHAMBRE DES DÉPUTÉS RAPPORT FAIT AU NOM DE LA COMMISSION CHARGÉE D'EXAMINER
LE PROJET DE LOI PORTANT FIXATION DU BUDGET ORDINAIRE DES SERVICES CIVILS DE
L'EXERCICE 1919 (AGRICULTURE), PAR M. ADRIEN DARIAC, DÉPUTÉ (SESSION DE 1919,
SEANCE DU 22 MAI 1919, ANNEXE N° 6164).

The remarkable development of agricultural credit business during the years preceding the outbreak of hostilities was appreciably affected by all the obligations and necessities arising out of the war.

Mobilization deprived the countryside of the young and strong men, and tanning had for the most part to be carried on by women and old men who, generally speaking, hesitated to have recourse to agricultural credit in the absence of the head of the family. Moreover the high price of requisites, the scarcity of labour and the difficulties of transport prevented farmers from incurring large expense for their farms. Finally, the agricultural credit banks themselves found that their activity was impeded or even arrested by the fact that their chief servants were called to arms.

In spite of these unfavourable circumstances, most of the district banks have continued to render great services to their members and by means of an appropriate contribution of funds to help the agricultural syndicates to make, for their members, collective purchases of agricultural requisites.

In order to examine the working of agricultural credit in 1918, we must consider successively: (1) short-term credit (law of 31 March 1899); (2) individual long-term credit (law of 19 March 1910); (3) collective long-

term credit (law of 29 December 1906); (4) the application of special laws aiming at meeting the new needs arising out of the war; (5) the various questions studied by the agricultural credit department in the Ministry of Agriculture.

§ 1 SHORT-TERM CREDIT.

Short-term loans, made on principle for the time between the sowing and harvesting of a crop, and intended for the purchase of seed, manure, fertilizers, etc., have not been, for the reasons already given, either very numerous or very large. The district banks, with the exception of the Nièvre bank which received an advance of 50,000 francs, have been able to make these loans, without asking for new advances from the State, with their available resources. These resources are in the case of some banks considerable, owing to the limited number of their loans and the many repayments made by borrowers in consequence of the rise in the selling price of agricultural produce.

§ 2. INDIVIDUAL LONG-TERM CREDIT.

The district banks, which in the beginning granted long-term credit somewhat grudgingly, soon recognized the usefulness of loans of this kind which allow young farmers to build up country homes for themselves. The advances for which they applied to ensure the granting of loans of this kind passed from 2,329,000 francs in 1910 to 5,121,800 francs in 1912. In 1913 the advances applied for fell to 3,500,000 francs, but this was only a passing reduction, and it is believed that the rise in applications would have been resumed in the following years. Unfortunately mobilization, entailing the calling-up of young farmers and the difficulty, with the lack of the necessary staff, of examining the applications for loans received by the district banks, resulted in a limitation of the number of applications for advances to enable the granting of long-term credit.

In 1918 the following advances were made :

Grantees	Advances granted francs
District bank of Alpes Maritimes	30,000
» » » Est, at Épinal	40,000
» » » Indre-et-Loire	50,000
» » » Aube	50,000
» » » Gironde	100,000
» » » Loiret	100,000
» » » Vienne	100,000

The advances to the district banks of Gironde, Indre-et-Loire, Loiret and Vienne were made with the reservation that these banks should repay

to the Treasury, on their short-term advances, the sums of 100,000 francs 50,000 francs, 25,000 francs and 25,000 francs, respectively.

The repayments to the State of the annual instalments paid by borrowers have been made regularly. They amounted for 1918 (up to 12 October) to 864,537 francs.

§ 3. COLLECTIVE LONG-TERM CREDIT.

The development of the co-operative societies, which was continuous up to 1913, was also interrupted by events. The amount of the advances to district banks for co-operative societies, which was 964,325 francs in 1908, was 3,890,940 francs in 1913. Thenceforth this amount fell, to 1,841,350 francs in 1914, 761,950 francs in 1915 and 171,400 francs in 1916; then rose slightly in 1917 to 312,900 francs. In 1918, until 1 October, advances amounting to 97,000 francs were made for co-operative societies.

A certain number of societies which proposed, on the eve of hostilities, to apply for agricultural credit, were completely disorganized by the mobilization of their managers and members. Those which remained were not sufficient to ensure the course of business with their own produce only, and could not even get together a sufficient quorum to pass the necessary resolutions in a general meeting. On the other hand requisites were lacking, or their price, like that of building, notably exceeded the figures anticipated in the original specifications. Most of the co-operative societies consequently gave up the idea of carrying out their plans. However the prolongation of the war, and the great advantages which the societies could derive from the high selling price of their produce, induced some of them to make an effort to continue working, and therefore to ask either for a first or for a complementary advance in order to cover the sums by which costs exceeded those contained in specifications made before the war.

Those who had obtained such advances before the current year generally amortized them regularly. The district banks were asked to see that instalments were paid when they fell due, and to repay the amount of these instalments to the Treasury. Amortization payments thus made to the Treasury in 1918 reached the sum of 1,612,961 francs on 1 October.

§ 4. APPLICATION OF SPECIAL LAWS AIMED AT MEETING THE NEW NEED ARISING OUT OF THE WAR.

A. *Law of 6 October 1916.* — This law, which allows communes to obtain advances for bringing abandoned lands within their territory under cultivation, has not yielded all the results which might have been expected from it. On the one hand, the one year which it gave for repayment seemed a short period to allow for the remunerative farming of land which sometimes had been uncultivated for several years; and, on the other hand, the distribution of gains and losses seemed complicated. Lastly, the municipal receivers, charged to receive the advances and to pay them to those con-

cerned, did not always discharge this duty with the necessary diligence. For this last reason, a certain number of communes even gave up their prospect of receiving the advances granted to them because they had not found them available at the right time.

In these circumstances it was in the beginning of 1918, judged preferable in the interests of the communes to give them the advances for which they asked not under the law of 6 October 1916 but under that of 7 April 1917 with which we shall deal presently.

Under the law of 6 October 1916 the communes had received on 1 October 1918 advances amounting to 409,291 francs, namely 393,661 francs in 1918 and 5,630 francs in 1918.

B. Law of 7 April 1917. — This law, which also aims at providing special advances for bringing abandoned lands under cultivation, is complementary to that of 6 October 1916, but is applicable to a wider field since it allows advances to be made not only to communes but also to co-operative societies and societies for mechanical cultivation. It better meets the needs of farming because it makes the term of advances three years, a period which corresponds to the three-year crop rotation generally practised in the country. It provides for no distribution of gains and losses, and thus avoids the difficulties attaching to the execution of the law of 1916.

The law of 1917 was applied to some communes which asked for advances under the law of 1916, but above all it came to the help of private initiative. It is the co-operative societies for the cultivation of abandoned land which reaped the largest benefit from it. These societies, formed among farmers who pool their lands in order to farm them more easily, render great service. Because they group their members' holdings they allow of the use of improved machinery, such as motor tractors, and thus lessen the difficulties due to the costliness and scarcity of labour. They make the advantages of grouping holdings for the execution of works of cultivation apparent to the peasants, and prepare the way for the consolidation of properties.

Unlike the law of 1916, that of 1917 does not insist on the formation of a paid-up capital by members of a society. The security it requires is found in the collective obligation which members assume saving members of societies in the invaded districts who enjoy exemption.

The particularly advantageous provisions of the law of 7 April 1917 have already evoked a large number of applications for advances, notably from the co-operative societies in the liberated districts.

On 1 October 1918 co-operative societies had received advances amounting to 2,758,850 francs, namely 614,000 francs in 1917 and 2,144,850 francs in 1918.

Of the societies receiving an advance in 1918, one of the most interesting is the Eure-et-Loire society which obtained two advances, totalling 160,000 francs, for the collective bringing under cultivation of nearly 1,000 hectares.

Some of the societies concerned found in March and June 1918 that their territory was again occupied by the enemy, and reconstituted them-

selves in the interior of the country where they resumed the cultivation of abandoned lands.

The impulse received by the farming societies is an interesting symptom. It proves that farmers more and more understand that it is by pooling their resources and their efforts that they will succeed in restoring prosperity to the agricultural industry.

C. *Law of 9 April 1918.* — This law institutes special advances, which may amount to 10,000 francs and are for a maximum term of twenty-five years. They are intended for the purchase of small rural holdings for military pensioners and the civilian victims of the war. The law proposes that the means of securing an independent life, by work proportionate to their often diminished physical capabilities, shall be procured for the victims of the war. It is hoped that it will establish on the land or bring back to it a considerable number of disabled men, whom it will enable to build up homes and recover their health. This law seems to have been very favourably received. As soon as the decree for its execution, dated 19 July 1918, was published, the necessary instructions were issued to the district banks, through the medium of which the loans are made. A certain number of these banks have already taken the steps necessary for giving force to the law within their districts. Some of them have even made an application for the advance of sums for their loans.

§ 5. VARIOUS QUESTIONS EXAMINED BY THE AGRICULTURAL CREDIT DEPARTMENT OF THE MINISTRY OF AGRICULTURE.

The execution of new laws which concern agricultural credit banks, and the circumstances in which a certain number of these banks found themselves in consequence of the occupation of the northern and eastern departments of France, induced the agricultural credit department to examine various questions as to which the district banks have been circularized.

(a) *The Power of Farmers in the Invaded Country to obtain Agricultural Credit Loans.*

Since several district banks, those of Lille, Cambrai, Péronne and Ver vins, were within the invaded territory, and others, those of Rheims, Amiens, Arras and Oise, suffered much by military operations, the farmers belonging to these banks, who were refugees in the interior of the country, found it difficult to procure the loans necessary to them. The district banks in the districts where they were temporarily domiciled did not know them and showed a certain hesitation in accepting their applications. In order to end this state of affairs, which prejudiced the interests of farmers who were particularly worthy of help, a circular was sent on 27 July 1918 to all the district banks, urging them to give all possible assistance to borrowers of this class as to whom information could often be obtained from the manager of their original district banks which had been evacuated to the interior of the country.

(b) *Law of 26 July 1918 and Decrees of 21 and 24 September 1918 as to the Moratorium.*

Many farmers, who had contracted loans with the district agricultural credit banks before the war, made a point of fulfilling their engagements as soon as they could but this example was unfortunately not followed by all the borrowers who found themselves in a position to discharge their debts. The law of 26 July and the decrees mentioned above allow proceedings to be taken to some extent against these unconscientious debtors, and the district banks were asked to take note of these new provisions by a circular of 25 October 1918.

Agricultural credit has for four years undergone a heavy trial. An institution which had not solid foundations would have been seriously shaken — its existence would even have been compromised — by the crisis through which agricultural credit has passed. The devotedness of the managers of agricultural credit banks, and the deep trust in them constantly evinced by the farmers, have however allowed the associations to retain all their vitality. With the return of peace they will play a considerable role. The necessity of supplying large quantities of manure for land neglected since 1914, and of procuring agricultural implements at high prices, in order to compensate for the scarcity of labour, the execution of new laws, notably that of 9 April 1919 which institutes special loans for the acquisition of small rural holdings for military pensioners and civilian victims of the war, the development of syndicates and co-operative societies, and, in general, the imperious obligation to produce — all this will give to agricultural credit a very important place among factors for the economic restoration of the country.

RUSSIA.

THE CENTRAL UNIONS FOR PURCHASE AND SALE.

SOURCES :

THE EVOLUTION OF THE GOODS DEPARTMENT OF THE MOSCOW NARODNY BANK. — *The Russian Co-operator*, Vol. 3, No. 9, London, September 1919.

THE WORK OF THE GOODS DEPARTMENT OF THE MOSCOW NARODNY BANK. — *The Russian Co-operator*, Vol. 3, No. 10, London, October 1919.

MASLOV (S.): THE CONSOLIDATION OF AGRICULTURAL CO-OPERATION IN RUSSIA. — *Ibid.*

"THE CO-OPERATIVE GRAIN" — *Ibid.*

THE ALL-RUSSIAN UNION OF POTATO GROWING CO-OPERATIVE SOCIETIES — *Ibid.*

THE CENTRAL ASSOCIATION OF FLAX GROWERS. *The Russian Co-operator*. Vol. 3, No. 11, London, November 1919.

The rapid growth of the business in the supply of agricultural requisites and the sale of agricultural produce carried on by the Goods Depart-

ment of the Popular Bank of Moscow transformed it, in the space of five years, into a practically independent and self-contained organization, closely bound up with the network of agricultural and credit societies which covers the whole of Russia. A reorganization of the business became necessary and at a meeting of the shareholders of the Bank, held in June 1918, it was decided to transfer its purchasing operations to a specially created All-Russia Agricultural Co-operative Purchasing Union, while its operations in respect of the marketing of agricultural produce were transferred to a number of separate central organizations each embracing the corresponding societies and unions of the whole of the country.

Before describing these central organizations, it will be well to give a slight sketch of the Goods Department of the Popular Bank of Moscow.

§ 1. THE GOODS DEPARTMENT OF THE POPULAR BANK OF MOSCOW.

The Popular Bank of Moscow, which was established in 1912, very soon acquired the position of a centre for all the Russian co-operative societies, more particularly the agricultural co-operative societies. It had to undertake, to an ever increasing degree, the supply of implements and other agricultural requisites and the marketing of agricultural produce. To carry on this branch of its work, a Goods Department was formed in 1913. This Department acted both as a purchasing centre, placing large orders on the markets for all kinds of machinery and implements, and retailing them to the co-operative unions and societies and other institutions, and as a selling agency, bringing to the markets of the world flax, butter, eggs, meat, grain, and other agricultural produce.

Towards the end of 1917, the department consisted of the following sections: (1) The Technical Bureau, with sub-sections for metal and metal ware, agricultural machinery and binder-twine, and motors and machines; and sections for dealing with (2) seeds: (3) insecticides and fungicides; (4) chemical manures and (5) products of dry distillation of wood.

The *Technical Bureau* succeeded in concluding agreements with a number of works manufacturing agricultural machinery, both in Russia and abroad. The total number of such works on its lists at the end of 1917 was 68.

The *Seed Section* which acted both as a purchasing and a selling agency was instrumental in supplying 11,800 tons of seeds during 1917. The section has its own seed-cleaning station in Moscow. All the transactions in seeds are carried out under the supervision of a specially created "Seed Council of Central and Co-operative Organizations," and a special Seed Committee composed of experts and specialists has been formed by the Popular Bank of Moscow for the purpose of studying and devising means for raising the standard of Russian seeds and setting up seed-growing farms.

The *Insecticides and Fungicides Section* was first started in 1917, and by agreement with the then Ministry of Agriculture the Popular Bank of Moscow became the sole agent of the Ministry for importing and purchasing insecticides and fungicides and for supplying them to the whole of Russia.

During 1917 the section supplied over 3,000 tons of sulphate of copper and other insecticides and fungicides to the total amount of over 4,000 tons. At that time, the whole of the chemicals used for the control of pests was imported from abroad, but the section set itself to encourage home production. Its efforts were crowned with considerable success. At its instance the Kyshtym Works Company have erected a special factory for the manufacture of sulphate of copper capable of a yearly output of over 3,000 tons.

The *Chemical Manure Section* supplied during 1917 over 6,000 tons of fertilisers, including 1,000 tons of superphosphate from Okhta; 1,000 tons of superphosphate from Samara; 2,500 tons of superphosphate from Vladivostok; 900 tons of sulphate of ammonia; and 200 tons of Chili nitrate.

The *Section dealing with the Products of the Distillation of Wood* was intended to provide the medium for combining the work of the numerous small tar-distilling artels and their local combinations into a Central All-Russia Union. It dealt in turpentine, tar, pitch, charcoal, etc.

An idea of the amount of work carried through by the Department can be gained from the following table, prepared for the meeting of shareholders of the Popular Bank of Moscow in November 1918.

*Sales by the Goods Department of Agricultural Requisites
and Agricultural Produce.*

	1913	1914	1915	1916	1917	1918 (Ten Months)
	Roubles	Roubles	Roubles	Roubles	Roubles	Roubles
Agricultural Machinery	306,200	354,900	252,100	2,522,800	9,244,200	30,068,800
Binder twine . . .	4,500	131,700	271,800	6,921,000	14,024,200	
Iron and ironmongery.	110,700	219,800	225,800	2,355,800	3,110,200	
Seeds	32,100		615,300	738,000	5,879,700	12,822,100
Feeding stuffs. . . .		14,500	980,600	105,700	88,800	
Fertilisers	3,600	9,400	5,100	33,100	227,100	3,907,800
Insecticides and fungicides.				1,609,800	9,581,600	
Products of dry distillation of wood . . .		—	69,200	464,800	476,100	
Miscellaneous agricultural products . . .	69,700	137,100	1,038,500	507,100	920,100	
Total	526,800	897,400	3,458,700	15,378,300	43,852,300	46,799,000

§ 2. THE NEW CENTRAL UNIONS.

The *All Russia Agricultural Co-operative Purchasing Union* was formally established in November 1918 and the inaugural meeting of its members took place in December 1918. The objects of the Union are described

as "the unification of all co-operative organizations engaged in the purchase, treatment and sale of agricultural produce for the purpose of organizing joint purchases of all kinds of implements and materials required in agriculture and for the treatment, transport, storage, and sale of its products, as well as the unification of the whole of agricultural co-operation for the purpose of furthering the material welfare of the members of agricultural co-operative societies and their moral development."

The whole of the machinery of the Goods Department was handed over to the new Union, as well as all its assets including goods on hand to the value of 37.9 million roubles. Some 10 million roubles worth of goods belonging to the Goods Department have been detained in Siberia. The estimates for the first year provide for purchases amounting to 45 million roubles.

The work of the Goods Department in marketing agricultural produce has now been divided amongst nine different organizations, most of which were founded during 1918.

The Central Association of Flax Growers was the first to be set up, having been formed in 1915 early in the history of the Goods Department. It has been several times referred to in the pages of this Review (1).

The following table shows the growth of the membership of the Association:

Date	Unions of Societies	Individual Societies	Total Organizations
May 1915.	—	5	5
July 1916.	18	82	100
July 1917.	37	135	172
July 1918.	58	150	208
September 1919 . . .	66	162	228

The unions affiliated to the Association comprise over 4,000 individual co-operative societies,

The Central Co-operative Union of Hemp Growers, was formed in June 1918, embracing at the beginning 18 local unions. The Popular Bank of Moscow took up shares in the new union to the value of 250,000 roubles and assisted it with credit. In October 1918 the membership increased to 30 local unions of co-operative societies, and up to that time the new organization handled about 10,000 tons of hemp, the total being worth 10 to 12 million roubles. The Union controls about 25 per cent. of the hemp produced in Russia, and it has established and leased in the provinces of Voronezh, Kursk, Tambov, and Orel, a number of works for manufacturing hemp articles, and also promoted a number of peasant arts for this purpose.

The Central Association of Fruit Growers and Market Gardeners was formed in April, 1917. The inaugural meeting was attended by representatives

(1) Issues of October 1916, page 27, July 1917, page 14 and June-July 1919, page 351.

of over 20 local combinations. The Popular Bank of Moscow took up 1,000 shares valued at 250,000 roubles (1).

The Central Union for the Sale of Poultry Products ("The Co-operative Egg") was formed in August, 1918, but it began its activities only in January 1919. Up to that time it was joined by about 15 large local unions, while amongst its promoters there is also one Credit Union from Siberia.

The All Russia Co-operative Union for the Development of Home Industries and the Sale of their Products ("Kustarsbyt") was founded in July 1918, and its object is "to organize home industries on co-operative lines and to sell co-operatively the articles produced by the workers and their artels, and also to promote all forms of industrial pursuits and their conduct on co-operative lines." The Popular Bank of Moscow was one of the founders of this Union, and acquired shares for 100,000 roubles. The membership of the union is spread over a number of provinces of Russia, including those of Saratov, Kostroma, Jaroslav, Tver, Riazan, Nijni-Novgorod, Penza, and Perm.

The Central Co-operative Union for the Sale of Meat and Animal Products confined its work to preliminary investigations and studies of the future possibilities of marketing and exporting meat and animal products.

The All-Russia Co-operative Association for the Sale of Forest Products. The civil war, which has placed the northern region with its Union of Co-operative Timber Associations outside the sphere of influence of the Goods Department, prevented the realization of this organization. Therefore, the Goods Department continued to carry on its work in this branch, although on a limited scale. In the main the work was conducted with the Vologda Union of Forest Artels, but it proved impossible to transport the whole of the considerable quantity of timber prepared by this Union. The department has also purchased various materials for forest cutting for over a million roubles for the co-operative societies and artels.

With the *All-Russia Union of Co-operative Societies for the Treatment of Potatoes* and the *Central Union of Co-operative Societies* (The "Co-operative Grain"), we will deal in greater detail in the sections which follow.

§ 3. THE ALL-RUSSIA UNION OF CO-OPERATIVE SOCIETIES FOR THE TREATMENT OF POTATOES.

The All-Russia Union of Co-operative Societies for the Treatment of Potatoes called shortly Potato Union, ("Kartofelsoyus") was formed in May 1918. Its membership consisted in February 1919 of 82 unions and industrial societies from the provinces of Vladimir, Kostroma, Jaroslav, Riazan, Saratov and others. Its objects are to unite the co-operative societies engaged in the growing of potatoes and the manufacture of meal, starch, molasses, and other by-products, to assist them technically and otherwise in their work and to promote and to protect their interests.

On 1 February 1919 the share capital of the Potato Union amounted

(1) See our issue of October 1918, page 792.

to 262,773 roubles; the credit afforded to it by the State Bank, the Popular Bank of Moscow, and various State authorities with whom it entered into business relations, amounted to 16 million roubles. The total turnover of the Union since its formation reached the sum of 125 million roubles, of which about 43 million roubles represent the turnover for January 1919. The Union is represented by its own delegates on all Government bodies concerned with the economic life of the country and, naturally, also on all central co-operative bodies, such as the Council of the All-Russia Co-operative Congresses, the All-Russia Agricultural Co-operative Purchasing Union and the Council of United Agricultural Co-operation ("Selskossviet"). The Union publishes a bi-monthly journal "Soyuskartofel".

During the ten months between the formation of the Union and February 1919, the activities of the Union had already given considerable results. The members of the Union owned 70 works engaged in the manufacture of potato products and the total quantity of starch turned out by these works reached 350,000 tons. In addition to the works owned by the members of the Union two molasses and two starch works are owned jointly by the Union and some of its members. The Union has leased an engineering works for the manufacture and repair of the machinery required in the industrial concerns of its members.

The Supreme Economic Council, the highest authority in Soviet Russia for organizing and controlling the industrial resources and life of the country, has placed the Union in charge of the whole of the potato-drying industry all over the country, and has entrusted to it the erection of ten potato-drying works, for which purpose the Union received an advance of one million roubles. Of the above works, the erection of six has already started, and it was hoped to complete them during 1919.

A starch works, with a productive capacity of over 1,000 tons of dry centrifugal starch of the highest quality, has been erected in the province of Kostroma. Another works in the same province has started, for the first time in Russia, the production of sugar in crystals. The output of these works amount to ten tons of sugar per day, which figure it is projected to increase during 1919 to over 30 tons per day.

The Union has set up a number of departments for conducting the separate branches of its work.

The Technical Department advises the co-operative societies affiliated to the Union on all questions bearing on the growing of potatoes and the manufacture of potato-products. Amongst other matters this department has been instrumental in supplying electric power for some of the works and also to the neighbouring localities.

The Trading Department supplies to the affiliated societies all requisites for their industry, including fuel and machinery. During the ten months of the existence of the Union this department has had a turnover of over 2,000,000 roubles, and has secured the proper supply of fuel and machinery for the whole season for 45 co-operative works.

The Agronomic Department, which is in charge of qualified experts, is engaged in investigating the position of potato-growing in various parts of

the country. It intends to proceed with the setting up of experimental stations, of which one in the province of Kostroma is already in working order.

An important task facing the Union is the erection of proper storage accommodation in the regions of potato cultivation for protecting the produce from cold and diseases, and for facilitating its accumulation and control as far as its marketing is concerned. This work is conducted in conjunction with the People's Commissariat of Agriculture, which is financing the erection of such stores, of which a whole network is planned.

§ 4. THE CENTRAL UNION OF CO-OPERATIVE SOCIETIES.

This Union, which is also called shortly the "Co-operative Grain," was organized in August 1918 and is one of the largest combinations formed at the instance of the Popular Bank of Moscow. The objects of this organization are to provide a centre for co-ordinating co-operative activities in the purchase, sale, storage, transport and treatment of grain, seeds, and other grain products, both for the home and export trade, and generally to promote the progress of this branch of agricultural pursuits. For the attainment of these ends the Union sets itself, (a) to assist the marketing of the products of its members; (b) to organize joint purchases of seeds; (c) to provide its members with financial means for the needs of their trade, by advancing them money on the security of consignments of grain and other products taken over from them for sale; (d) to advise and instruct on all questions relating to the trade in corn; and (e) to promote and represent their interests.

According to the rules the membership of this organization is confined to unions and combinations of co-operative societies, individual societies being admitted to membership only when there are no corresponding unions in their localities. The experience of co-operative dealings in grain during the war having shown that it is credit unions which are principally instrumental in carrying on these transactions, it was decided to enlist their services and sympathy, and rely on them for support in the work of the Union.

The grain monopoly declared in Russia and the political conditions prevented the Union from starting normal operations. The turnover of the organization during the months August-December 1918 reached one million roubles. Basing its work on the close contact established with the local co-operative unions and societies, the Central Union hopes to develop its operations on a large scale and to help to increase the importance attained by co-operation in the corn trade. The "Co-operative Grain" has concluded an agreement with the People's Commissariat of Supplies, whereby the Union is allowed to use to the full the machinery of co-operation for the collection of grain from the peasants. In the early part of the year 1919 co-operative societies handled about 300,000 tons of wheat, rye, oats and other cereals, or about 25 per cent. of all the grain collected through the

machinery of the grain monopoly. In some localities their share was 30 per cent. and higher.

The Central Union has also concluded an agreement with the People's Commissariat of Agriculture referring to the supply of seeds.

In order to carry through the projected transactions, the Union intends to draw freely on the funds placed at its disposal, partly by the State, for financing its members and agents.

§ 5. THE UNITED AGRICULTURAL CO-OPERATIVE COUNCIL.

In order to provide the machinery for the consolidation of agricultural co-operation, an organization, called the United Agricultural Co-operative Council, or shortly the Rural Council (*Selskossoviët*), was formed at Moscow in December 1918 to be attached as a non-trading department to the All-Russia Purchasing Union. It is the guiding and co-ordinating centre of agricultural co-operation.

According to the rules adopted by the inaugural meeting the objects of the Rural Council are (a) To further the solidarity and unity of agricultural co-operation in all questions affecting home and foreign trade, transport, development of industrial resources, the financial policy of the State, etc.; (b) to examine and settle all problems arising in connection with agricultural co-operation; (c) to represent and protect the interests and needs of agricultural co-operation in relation to the government and public institutions; (d) to gather and publish information bearing on the work of agricultural co-operation, to carry out all kinds of investigations and to publish periodical and other publications; (e) to convoke congresses and conferences for dealing with the aims of agricultural co-operation; (f) to organize lectures, courses, schools, exhibitions, etc.; (g) to guard the legal rights of agricultural co-operation and afford legal advice and assistance; (h) to instruct and advise agricultural co-operative organizations; (i) to assist the unions and other organizations affiliated to it in procuring the services of trained officials and employees.

The Council has set up four sections, amongst which its work is divided:

The Administrative and Legal Section advises and replies to the inquiries of the affiliated organizations, and acts on their behalf before the authorities.

The Organizing Section is engaged in devising schemes for the organization of agricultural co-operative societies, and settles misunderstandings and disputes arising between the affiliated societies.

The Economic Section studies and prepares the measures required for raising the standard of agricultural practice amongst the peasantry and other questions of economic policy.

The Publishing and Propaganda Section publishes a monthly journal, "The Messenger of Agricultural Co-operation," as well as leaflets, posters, pamphlets, annuals, etc., on question affecting agricultural co-operation.

On the Rural Council are represented practically all the leading forms of agricultural co-operation, and this justifies hopes as to its further rapid growth and its ability to promote the progress of agricultural co-operation in Russia and the improvement of Russian agriculture.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CANADA.

1 THE DUNDAS COUNTY CO-OPERATIVE EGG MARKET — *Farm and Dairy*, Vol XXXVIII, No. 39, Toronto, 25 September 1919.

The Dundas County (Ontario) Co-operative Poultry Association was founded in 1911. Its activity in its first four years of existence is shown by the following figures :

Year	Number of branches organized	Number of branches active	Number of dozen eggs consigned	Value
—	—	—	—	—
1911	4	4	14,970	\$ 3,243
1912	2	6	29,048	8,182
1913	6	12	126,134	28,547
1914	4	15	162,348	36,600

These figures show a general progress but one which was not shared by all the branches. It was determined to candle and grade the eggs, and to provide cold storage so that they could be held over, when necessary, until such time as they could be sold at a profit. A successful application was made in February 1915 to the Department of Agriculture for a subsidy under the Cold Storage Act, and a cold storage plant was erected, from this and other sources, and completed in 1915.

In the spring of 1915 the Dundas Co-operative Association, Limited, was organized and incorporated under the laws of Ontario, having an authorized capital of \$10,000 divided into 500 shares of \$20 each. In 1915, when it began business, 50 shares had been subscribed and 5 per cent. paid on them ; on 31 December 1917, 70 shares had been subscribed and \$70 had been paid in on the capital stock ; on 31 December 1918, 296 shares of stock had been subscribed.

The following figures show the business done by the association since its new organization :

Year	Number of dozen eggs handled	Value	Profits
—	—	—	—
1915	137,720	\$30,103	—
1916	158,326	25,983	\$1,192
1917	169,728	76,989	1,416
1918	154,045	72,442	2,014

Both in 1916 and in 1917 one thousand cases of eggs were exported, and in 1918 nine hundred cases were sold for export to the Dairy Produce Commission.

The local market price is paid for the eggs as they are delivered by or collected from the producer. At the end of the year, after all expenses have been paid, a co-operative dividend is paid to each shareholder not on the amount of capital he has invested in the association but on the number of dozen special or extra-grade eggs he has supplied. For purposes of advertisement the association until 31 December 1917 paid co-operative dividends to non-shareholders from whom it received eggs.

The co-operative dividend declared for 1918 was 15½ cents per dozen special and extra-grade eggs for January and February, 6½ cents for March, 3 cents from 1 April until the close of the gathering season, and 10 cents from this last date until 31 December.

In 1918 the association also handled 31 carloads of foods for live stock. It has plans for handling live stock, cheese, cheese-factory supplies, agricultural implements and other requisites of farms and dairies, and for improving the quality of eggs, poultry and live stock.

* * *

2 LAND SETTLEMENT ENTERPRISE OF THE UNITED GRAIN GROWERS — *Farm and Dairy*, Vol XXXVIII, No 33, Toronto, 14 August 1919

The United Grain Growers, that great organization which was formed by the amalgamation of the Grain Growers' Grain Company and the Alberta Co-operative Elevator Company and with which we have already dealt in this review (1), has lately undertaken a new branch of activity. As the United Grain Growers' Securities Company, Limited, it began business as a land agency on 1 June 1918.

The Securities Company has offices at Winnipeg, Regina, Saskatoon, Calgary and Edmonton, local representatives throughout Western Canada, and travelling agents. Classified lists are kept of all the land of which the selling is entrusted to the company, and wherever possible the owner's description is verified by a local representative.

An intending purchaser of a farm can go to an office of the company, where he is told of any property for sale which is suitable to the kind of farming he wishes to undertake. Afterwards a representative of the com-

(1) See our issues for March 1917, pages 17-21 and January 1918, page 11.

pany will accompany him to any farm he selects, and he can immediately conclude its purchase. The company draws up the agreement of sale, free of charge, receives the first payment, and also, if the seller desires, collects further payments. The company's sole and unvarying profit is a commission of 5 per cent. payable by the owner when his land is sold. In no case does the company itself buy or sell land.

The company will appraise any piece of land in any of the settled districts of Western Canada. This work is done by the travelling agents, who ascertain the situation of the land, its position in relation to roads, markets, the post-office, the school and church, the nature of the soil, the value of buildings, the water supply, the cultivated acreage and the crops cultivated, and who name what they consider to be a fair price for the land.

The company also acts as agent in the three prairie provinces and in British Columbia for two British insurance companies whose assets amount to more than \$50,000,000.

3 A JOINT-STOCK PACKING COMPANY IN MANITOBA — *The Grain Growers' Guide*, Winnipeg, 22 October 1919

The Farmers' Co-operative Packing Company of St. Boniface, officially called the Farmers' Packing Plant Limited, has been incorporated under the laws of Manitoba and is in process of establishing itself.

Its authorized capital is \$500,000, of which \$250,000 must be subscribed before it can begin business. It has an option to buy the property of the Manitoba Abattoir and Packing Plant Company, which was formed a few years ago, chiefly among French Canadians, but has been handicapped by lack of funds. The price named for this company's plant in the option is \$223,000, of which about three fourths is to be taken in shares of the new company.

Of the \$250,000 which must be subscribed before the new company can become active, shares amounting to about \$100,000 have already been taken up, the largest amount held by one individual being \$2,000. There is only one form of stock and all has been sold at the par value of \$100 a share.

The word "co-operative" has been eliminated from the company's official title because it is in fact a joint-stock company: dividends are payable only on capital and shareholders vote according to the number of shares they hold. No salesman is authorized to guarantee any rate of dividend, but 7 per cent. has been mentioned as a probable rate.

Besides buying live stock for slaughter and sale, the new company proposes to receive, slaughter and dress farmers' stock, and place it in cold storage to remain there until the owner's instructions to sell it on commission are received. Eggs will be dealt with similarly. It is expected that this service will be valuable in that it will prevent the glutting of

markets and will improve prices. Every carcass will be stamped with the owner's number and the identity of his consignment will be preserved.

The new company is not connected with any other farmers' company or organization.

ITALY.

1. RESOLUTIONS OF THE AGRICULTURAL CO-OPERATIVE SOCIETIES. — *La Cooperazione Agricola*, Bologna, Nos 11 and 12, 1 May 1919.

The National Federation of Agricultural Co-operative Societies, which has its headquarters at Bologna, presented to the competent ministers last April a memorial in which are set out the resolutions and requests considered necessary by this federation to the future improvement of the federated co-operative societies. We reproduce the more important resolutions.

Concession by private treaty to agricultural co-operative societies of lands belonging to public bodies. — In order to understand this resolution it should be recollected that the decree-law, No. 1218, of 4 August 1918 (1), provided that cultivable lands of provinces, communes and public philanthropic institutions "might" be let by private treaty to agricultural co-operative societies constituted on the basis of the regulation of 12 February 1911, No. 278 (2), and that in cases of public auctions the bids of these societies would have preference over other equal offers. The federation in question now demands that when this decree is converted into a law the "right" of co-operative societies to obtain by private treaty the lease of the lands be recognized. The federation states that "this measure would be opportune and fitting, since it is the interest of the co-operative societies, which are composed of labourers in need of employment, to employ the largest possible quantity of labour on the farms let to them, and this would be to the advantage of these farms and therefore of the public bodies owning them. This advantage does not always accrue when the lands are farmed by private farmers who are often apt rather to exploit the lands, in order to ensure an income to themselves, than to cultivate them." The lands would be treated for in private in order to avoid public auctions, and to restrain the great rises in rents which are attended by serious consequences. For a tenant whose lease is too onerous finds himself in a difficult position, and is therefore tempted to reduce the number of days for which he hires labour, doing only such works as yield an immediate or less distant profit, and thus he calls more unemployment into being and restricts the productive capacity of the farm he has on lease. In addition, in order to stay the constant rise of rents, the federation calls for legislative provisions which will (a) recognize that co-operative societies which are in the condition

(1) See our issue for August 1918, page 629.

(2) See in our issue for November-December 1911 (*Monthly Bulletin of Economic and Social Intelligence*) the article on co-operative societies of production, labour and agriculture and the regulation of 12 February 1911.

determined by the decree, already mentioned, of 12 February 1911, No. 278, have a first option on the lands of public bodies which are to be let; (b) establish that when the demand seems to the co-operative society too high, the rent shall be fixed by two experts, one nominated by the public body interested and one by the co-operative society, and that these must appoint an arbiter if they disagree.

Prohibition to public bodies to alienate their lands. — Since nowadays it is found that public bodies often arrange for the sale of their lands, the federation asks that this be forbidden by a legislative provision. The federation observes in this connection that such a tendency could be justified in the past, when it was fitting for public bodies to simplify their functions and to avoid finding themselves one day in possession of a capital in land which had been depreciated by speculating tenants, but that it cannot be justified now when the agricultural co-operative societies which desire to obtain these farms have their own technical organization and offer the best guarantee for the right farming of the land, so that the alienation of the properties has become useless and even injurious to the owning bodies themselves, not to mention the fact that these properties are in fact part of the public domain and for that reason should not be sold.

Agricultural credit. — The federation also notes that the new needs of agriculture and the increasing number of agricultural co-operative societies (1) and of the farms they manage make it necessary that a larger sum of money should be available for agricultural credit. The sum hitherto placed at the societies' disposal has always been inadequate to the need. This fact is a grave preoccupation of the societies who may find themselves obliged, by the lack or scarcity of credit, to limit their activity to the farms they already have on lease, thus seriously injuring production and their interests. The National Institute of Credit for Co-operation should therefore dispose of larger funds with which to come to the aid of the co-operative societies formed by common labourers and aiming at assuming the management of farms.

In connection with agricultural credit the federation also notes the necessity for special rules for granting credit for stocking farms, that is for buying live-stock, machinery and implements. This is not credit granted for the work of the farming year, of which the effects will be exhausted during the year, like the credit granted for the purchase of manures, seed, fertilizers, etc. A co-operative society which has contracted a debt for stocking a farm it holds cannot extinguish this debt in the course of a year. There is question of a form of special credit which demands (a) a longer term for the extinction of the debt; (b) a liberality which will make possible

(1) The development of the agricultural co-operative societies commonly known as collective leaseholding societies was described by us, in so far as the provinces of Reggio Emilia, Ravenna, Padua and Bologna are concerned, in our issue for May 1918, in so far as the provinces of Modena and Mantua and Sicily are concerned in our issue for August 1918, and again in connection with the provinces of Parma and Bologna, and also with Ferrara province and Lombardy generally, in our issue for August-September-October 1919.

such purchases as will ensure normal husbandry on the farm held on lease ; (c) a rate of interest less than that normally payable on loans of working capital, properly so called ; (d) legislative provisions as to security in the form of liens on produce which will prevent these from constituting for the co-operative societies engagements injurious to their interests and of no corresponding benefit to the lending institution.

Land credit. — The federation further thinks it necessary that the National Institute of Credit for Co-operation should be supplied with adequate means for affording land credit. There are co-operative societies and groups of such for which the purchase of lands is the best means of consolidating their position. But their requests for credit with which to make such purchases are met by the Institute with difficulties on account of which they cannot obtain the necessary credit on the ordinary terms and according to the accustomed rules. It is nevertheless necessary that land credit should be among the forms of credit afforded by this Institute, which already has, in the sphere of agricultural credit, continuous relations with the agricultural co-operative societies and knows the position of each of them. It is necessary that the credit be given to the co-operative societies on favoured conditions, as regards term of loan and rate of interest, and that it be granted in a form which will facilitate and stimulate repayment.

An agency for regulating the granting of credit to agricultural co-operative societies. — In order to render more organized and secure the granting of credit to agricultural co-operative societies, in accordance with the principles we have laid down, the federation asks that an *Agricultural Credit Section* be instituted in the National Institute of Credit for Co-operative Societies, and be directed by a council to which representatives of the agricultural co-operative societies will belong.

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2 NEW ENCOURAGEMENT TO LABOUR CO-OPERATIVE SOCIETIES — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 217, 13 September 1918 and No. 39, 15 February 1919

The labour co-operative societies represent one of the most original forms of Italian co-operation. Formed among workmen, especially among labourers in the building industry, they arose with the principal object of withdrawing labour from the yoke of common contractors and themselves accepting contracts for public works directly. In certain districts — Emilia, Romagna — where there is an excessive labour-supply, they also aim at lessening unemployment, by obtaining the concession of works from the State and distributing the accompanying employment. These co-operative societies undertake by preference the making and upkeep of roads, bridges and canals, the construction of waterworks, the execution of works of land improvement and irrigation and the arrangement and transformation of lands, etc. Their development has been much helped by the passing of the special laws as to the contracts of co-operative societies which we examined in our issue for November 1914. Two recent decree-laws allow

them to expand and increase their activity, namely the lieutenancy decree, No. 107, of 6 February 1919, which makes rules for the execution of public State works, and the lieutenancy decree, No. 461, which regulates the concession of works of improvement to societies and individuals.

The first of these decrees amends existing provisions touching this matter with the aim of facilitating the execution of public works of the State, simplifying the procedure of expropriation, the conclusion of contracts and the granting of official approval, extending the competence of technical agencies, and making possible the desired revision of prices for works of which the execution is lengthy. It also introduces important facilities with regard to granting credits to the contracting firms and making consequent payments.

Articles 6 and 28 provide for co-operative labour societies. The former article lays down that the maximum value of a contract which can be ceded, by auction or private treaty, to a co-operative production and labour society or an agricultural co-operative production society is 500,000 liras. In the case of federations of co-operative societies this maximum is 5,000,000 liras or double the total sum of the maximum contracts which the federated society may accept. Contracts of a higher value than this maximum may be given to the federations, by private treaty, on the advice of the Higher Board of Public Works, if the administration considers that the federations offer sufficient technical and financial guarantees.

This decree, while it notably raises the maximum value of the contracts which may be given to these organizations, allows, as has been seen, by means of auction and of private treaty (1), a wider extension of their activity.

The second decree mentioned more especially concerns works of improvement and refers to the lieutenancy-decree of 8 August 1918, No. 1256. It encourages and facilitates concessions of contracts, simplifies technical procedure and the granting of official approval, regulates relations between owners of land to be improved and the concessionaries of works of improvement etc. This decree contains no special rule in favour of co-operative labour societies, but the sum of its rulings will allow associations of this kind to take contracts for the works in question, which will, when agricultural improvements are united to works of hydraulics, give many members of co-operative societies the opportunity of establishing themselves firmly on the land and transforming themselves from simple workmen to farmers.

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3. LANDS MANAGED BY COLLECTIVE LEASEHOLDING SOCIETIES IN THE PROVINCE OF RAVENNA. — *La Cooperazione Agricola*, Bologna, Nos. 22-23, 1 November 1919.

The most numerous and compact group of collective leaseholding societies in Emilia is that in the province of Ravenna. We dealt with their

(1) See in this connection the article in our issue for November 1914 (*Monthly Bulletin of Economic and Social Intelligence*) on co-operative labour societies and the contracts they undertake.

*Federation of co-operative societies of Ravenna province.**Lands farmed on 31 August 1919.*

Farming organizations	Names of farms	Owned area in hectares	Held for rent		Held on profit-sharing system, area in hectares	Total
			Area in hectares	Date of expiry of lease		
Co-operative Federation - Ravenna	Mandriole	1,000.—	—	—	—	—
Co-operative Federation - Ravenna	Valle Maggiore	—	239.19	1925	—	—
Co-operative Federation - Ravenna	S. Vitale	—	423.70	—	—	1,662 80
Labourers' Association - Ravenna	Valle Standiana	222.10	—	—	—	—
Labourers' Association - Ravenna	S. Vitale (Bonifico)	—	259.69	1925	—	481.79
Sobborgo Saffi - Ravenna	Dalloncello	—	72.42	1923	—	—
" " "	Fiumetto	—	10.14	1921	—	94.56
Sobborgo Fratti e Garibaldi - Ravenna	Sacca	—	122.—	1923	—	112.—
S. Alberto - Ravenna	Chiavicchino and adjacent land	—	60.82	1920	—	60.82
Mezzano - Ravenna	Acquisto	—	88.84	1923	—	—
" " "	Bendazza	—	136.05	1923	—	—
" " "	Corrieta (Bonifico)	—	46.50	1921	—	—
" " "	Cà del Bosco	—	—	—	40.—	—
" " "	Marianna	91.20	—	—	—	—
" " "	Marianella	75.86	—	—	—	480.45
Piangipane - Ravenna	Ponticelle	—	5 46	1921	—	—
" " "	Magazzino	—	94.65	1923	—	—
" " "	Marchesano	—	128.14	1927	—	—
" " "	Via Cerba Superiore	—	135.—	1927	—	—
" " "	Corte	71.85	—	—	—	435.—
Santerno - Ravenna	S. Vitale (Bonifico)	—	47.83	1921	—	47.73
Castiglione di Ravenna	Orfanella	—	13.66	1921	—	—
" " "	Savio	—	34.—	1927	—	47.66
Campiano - Ravenna	Porto Croce	—	12.98	1926	—	—
" " "	Bosco	—	36.56	1926	—	—
" " "	Oriolo	—	3.50	1926	—	—
" " "	Marana	—	42.71	1925	—	—
" " "	Gianni-Fantuzzi	—	5.46	1920	—	—
		1,461.01	2,019.30		40.—	3,422.91

*Federation of co-operative societies of Ravenna province (continued).
Lands farmed on 31 August 1919.*

Farming organizations	Names of farms	Owned area in hectares	Held for rent		Held on profit sharing system, area in hectares	Total
			Area in hectares	Date of expiry of lease		
	<i>Carried over.</i>	1,461.01	2,019.30		40.—	3,422.91
Campiano - Ravenna	Lorino	—	12.98	1920	—	—
» »	Raulli	—	5.45	1920	—	—
» »	Prita	—	2.05	1922	—	—
» »	Valle di Classe	34.17	—	—	—	—
» »	—	24.60	—	—	—	180.46
S. Pietro in Vincoli	Casetta	—	104.90	1920	—	104.90
S. Stefano (Ravenna)	Masullo	—	27.75	1920	—	—
» »	Ospedale & Bordoe	—	28.90	1926	—	—
» »	Prita	—	6.83	1920	—	—
» »	—	4.10	—	—	—	67.56
S. Bartolo (Ravenna)	Ospedale	—	23.58	1927	—	—
» »	Larghe Francesi	—	5.13	1928	—	—
» »	—	4.10	—	—	—	32.81
S. Pietro in Trento-Ravenna.	Ospedale	—	15.72	1927	—	15.72
Castiglione di Cervia	Romagnola	—	84.74	1920	—	—
» »	Prato Bassona	—	3.41	1920	—	—
» »	Prato Lungo	—	3.41	1920	—	—
» »	Risaie	—	—	—	102.50	—
» »	Bagno	170.85	—	—	—	364.91
Massalombarda	Bonvicini	—	—	—	35.63	—
»	Valenti	—	—	—	1.30	—
»	Prato Comune	—	25.21	1931	—	—
»	Podere Berta	—	5.05	1929	—	—
»	Podere Casino	—	5.36	1936	—	—
»	Risaia	—	35.31	—	—	—
»	Fondo Pioppa	12.50	—	—	—	—
»	Punta	4.50	—	—	—	124.87
Conselice	Gamberina	71.50	—	—	—	71.50
Bagnacavallo	Bonagaro	46.52	—	—	—	—
»	Prati Archi	—	71.76	1928	—	—
»	Ercoline	—	12.30	1927	—	132.58
Alfonsine	Beatrice	53.31	—	—	—	53.31
		1,887.16	2,499.15		179.43	4,571.53

origin and leading characteristics in an article in our issue for May 1918 to which we refer the reader. They have been constituted by labourers, generally as joint-stock co-operative societies, and they procure land for cultivation by a lease obliging them to pay rent or to render a share of produce. Among the various forms of such contracts in use the so-called "collective sharing" (*partianza collettiva*) deserves mention. This is a strict contract between the farmer of a farm and a group of labourers for the execution of a determined work of cultivation: the labourers engage to do all the necessary work, and receive in return a fixed share of the crop. Some societies also possess land of their own. As to the lands managed by the societies belonging to the Federation of Co-operative Societies of Ravenna Province, we have the data on pages 97 and 98 which refer to 31 August 1919.

4. THE DEVELOPMENT OF THE AGRICULTURAL CO-OPERATIVE MOVEMENT IN SARDINIA. — *Cooperazione e Mutualità Agraria*, monthly supplement of *I Campi*, No. 31, Rome, 31 August 1919; *Giornale di Agricoltura della Domenica*, No. 30, Piacenza, 27 July 1919.

The movement for agricultural co-operation and mutuality has in few districts of Italy developed so rapidly and constantly as in Sardinia. In the province of Cagliari there were 3 co-operative societies in 1907, 5 in 1908, 15 in 1909, 25 in 1910, 38 in 1911, 69 in 1912, 102 in 1913, 118 in 1914, 141 in 1919. In the province of Sassari there are to-day 51 agricultural co-operative societies. This development received a particular impulse from the law making special provision for Sardinia of 10 November 1907 (consolidated text) which, as the reader knows, instituted the *Casse Admministrative* as subsidiary banks of agricultural credit, and also the itinerant lectureships in agriculture with their beneficent work of propaganda and expert assistance. With the rise and prosperity of the co-operative societies the economic-agricultural problem is on the way to a happy solution. The affording of credit, through the medium of numerous rural banks, renders possible notable improvements in agricultural technique, spreading the use of chemical manures and machinery. The consumption of chemical manures rose from a little more than 3,000 quintals in 1908 to 15,000 quintals in 1909, 50,000 quintals in 1910, 72,000 quintals in 1911 and about 80,000 quintals in 1913. With the help of credit, medium-sized and small holdings could dispose of a larger stock of draught-animals and agricultural implements and machinery. The wellbeing of the rural population was thus increased, and was shown in a thousand different ways, including the accumulation of savings which was at first impossible because of the low remuneration of labour, often insufficient to allow the usurer's high rates of interest to be paid on the small amount of money invested.

In 1907 two co-operative agricultural consortia arose in the province of

Cagliari, and the dairy society of Bortigali and vinegrowers' co-operative society of Calasetta were constituted. In 1909 there were instituted, under the care of the itinerant lectureships in agriculture of Oristano and Orieri, the first unlimited liability rural lending banks. In April 1913 the first meeting of the agricultural co-operative societies of Cagliari province was held, and there were then 69 rural banks, 49 co-operative agricultural consortia and 10 miscellaneous agricultural co-operative societies. In the following December the first congress of Sardinian agricultural co-operative and mutual societies was summoned to Oristano. There were then 144 co-operative societies in Sardinia, 100 in the province of Cagliari and 44 in that of Sassari, and 116 societies for the mutual insurance of live stock. The co-operative and mutual societies grouped more than 30,000 members. On the occasion of this congress the Federation of the Agricultural Co-operative and Mutual Societies of Sardinia was founded for advertising, helping and inspecting the federated societies. In May 1914 the first Sardinian district congress was held. The federation, which intervened to deal with questions touching credit and agricultural co-operation, had an opportunity for bringing into notice the solidity and importance of Sardinian co-operation. In September the statistics of Sardinian agricultural co-operation down to 31 December 1913 were published. They showed that at that date 152 agricultural co-operative societies were active in Sardinia, namely 106 in the province of Cagliari and 46 in that of Sassari, and that they had a total membership of 13,525 landowning farmers. Statistics were also collected as to the societies for the mutual insurance of live stock, and they showed that there were 116 of them in the island, 88 in the province of Cagliari. Subsequently, in February 1915, the first general meeting of federated co-operative and mutual societies was held at Cagliari, and this gave occasion for a detailed review of the work of the federation in its first year. During the war the co-operative societies were at a standstill, partly because of the necessary lack of federal assistance, but they have shown that they possess healthy and vital elements, which give assurance of their more fruitful progress in the future. The programme of co-operative activity, drawn up by the federation mentioned, has the following noteworthy points: (1) inspection on the spot of all the federated agricultural co-operative and mutual societies; (2) the promotion of the entry into the federations of co-operative and mutual societies not yet members thereof; (3) the collection and publication of the statistics down to 31 December 1918 of co-operative and mutual agricultural societies in the island; (4) the carrying on of an active work of propaganda with a view to evoking, wherever possible, farmers' and stockfarmers' associations, co-operative and mutual in form, and aimed (a) at affording agricultural credit, (b) at acquiring and selling farmers' requisites and agricultural produce, (c) at the industrialization of the products of agriculture and stockfarming, (d) at mutual insurance against the mortality, theft and injury of live stock, against fires in farm and country buildings and against rural losses generally; (5) at work for the interior financial consolidation of the societies.

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5. THE AGRICULTURAL FEDERATIONS OF ALBENGA, PORTO MAURIZIO AND MILAN. — *I Campi*, No. 20, Rome, 18 May 1919; *La Cooperazione Agricola*, Nos. 11-12 and 18-19, Bologna, 1 May and 1 September 1919.

The Agricultural Federation of Albenga (Genoa) arose about 1900 and comprises about 1500 families of horticulturists. It presents an example, typical in Italy, of an organization for the collective consignment and sale of agricultural produce. The amounts of the goods it has in recent years consigned to various markets are shown by the following figures:

Consignments from 1914 to 1917 (in quintals).

Years	Turin	Milan	Genoa	Nice	Totals
1914 .	43,586	11,883	30,472	714	86,655
1915 . .	43,679	13,613	33,596	—	90,888
1916 . . .	36,405	9,269	38,951	350	84,975
1917 . . .	25,602	4,255	29,949	1,500	61,306
	149,272	39,020	132,968	2,564	323,824

The federation supplies its members, on their order with agricultural implements and machinery, saplings, seeds and manures, affords agricultural credit as an intermediary institution acting for the *Istituto di credito agrario per la Liguria*, promotes the technical education of its members, and generally safeguards their interests.

A new association, called the Agricultural Federation of West Liguria, has recently been constituted at Porto Maurizio and aims at installing small industries for the handling and converting of agricultural produce, at running general warehouses for the storage of agricultural produce and facilitating the granting of credit on produce stored therein, and at encouraging the resumption of the cultivation of abandoned lands and the extension of cultivation.

We reproduce the following figures as to the development of the Inter-provincial Agricultural Federation of Milan which groups more than 30 co-operative societies.

This federation undertakes the purchase and sale on behalf of its members and federated co-operative societies of agricultural supplies, machinery, stock, etc.

The Interprovincial Agricultural Federation of Milan.

	Members	Reserve	Capital	Capital and reserve	Total goods sold		Value
	No.	Liras	Liras	Liras	Quintals	Kg.	Liras
1911	5	—	375	375.00	—	—	—
1912	7	690.65	950	1640.65	2997	10	10,597.55
1913	9	690.65	2525	3215.65	5114	32	47,881.77
1914	10	856.23	3650	4506.23	6388	54	48,055.69
1915	14	1047.34	6225	7272.34	4267	46	75,863.57
1916	23	1371.25	13,225	14,596.25	4300	—	136,484.79
1917	23	1848.79	19,250	21,098.79	8224	—	334,512.75
1918	28	3009.09	22,125	25,134.09	11,074	—	644,332.55

SOUTH AFRICA.

1. THE FARMERS' CO-OPERATIVE WOOL AND PRODUCE UNION — *The Farmers' Weekly*, Vol. XVII, No. 440, Vol. XVIII, Nos. 445 and 446. Bloemfontein, 13 August and 17 and 24 September 1919.

A meeting of farmers of the Eastern Province of the Cape decided on 27 August 1919 to form the Farmers' Co-operative Wool and Produce Union, Limited. The aim is to create an organization capable of handling farmers' produce in a manner profitable to producer and consumer and tending to increase production. The Union intends at first to concentrate on marketing farmers' wool and mohair, and to extend its activity as opportunity offers. In particular, wool-selling agencies are to be opened at Port Elizabeth and East London. A secretary and nine provisional directors have been appointed; and the capital is fixed at the large sum of £100,000 because it will be necessary to import requisites and because it is hoped to buy and build stores. It is also hoped that the company will eventually work in co-operation with the Federated Farmers' Co-operative Association which has agents in London and New York.

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2. THE WESTERN PROVINCE FARMERS' CO-OPERATIVE UNION. — *The Farmers Weekly*, Vol. XVIII, Nos. 443 and 446. Bloemfontein, 3 and 24 September 1919.

A Farmers' Co-operative Union for the Western Cape Province was formed at a meeting held at Cape Town on 21 August 1919. The object of this association is the purchase of farmers' requisites. The proposed capital is £100,000 and there will be no allotment of capital until £25,000 have been subscribed. Each shareholder, who must be a farmer, will be entitled to one vote for every share he holds but may not hold more than 100

shares. Dividends may not exceed 10 per cent., any surplus being distributed among the shareholders in proportion to the amount of business each has done. A provisional board of eleven directors has been appointed.

3. NON-CO-OPERATIVE AGRICULTURAL ORGANIZATION. — *Official Year Book of the Union of South Africa*, No. 2, 1918. Pretoria, 1919.

Some three hundred agricultural associations and farmers' societies are distributed in the four provinces of the Union of South Africa. Most of them are affiliated to the Cape Province, the Natal, the Orange Free State or the Transvaal Agricultural Union.

Each provincial union has a standing committee, meeting at least four times a year, and holds an annual general meeting attended by delegates of the affiliated bodies. Ten delegates of each union together with representatives of the territories of Rhodesia and Mozambique form the South African Agricultural Union which meets annually to discuss matters affecting agriculture throughout the country. It has a president, elected annually, a secretary and an executive committee. Its congresses are attended by government officers, generally experts, who give information as to government action and supply technical and other advice.

This network of organizations is supported by subscriptions supplemented by grants from the Union government and the Provincial Councils of the Cape and Transvaal.

The following is a representative list of certain of the associations included which have specialized work :

The South African Stud-book Association, to which are affiliated :

- (a) The Cape Stud Breeders' Association.
- (b) The Orange Free State Breeders' Association,
- (c) The Friesland Cattle Breeders' Association of South Africa,
- (d) The Ayrshire Cattle Breeders' Association of South Africa,
- (e) The Shorthorn Society of South Africa,
- (f) The Afrikaner Cattle Breeders' Society,
- (g) The South Devon Cattle Breeders' Society of South Africa,
- (h) The Aberdeen Angus Cattle Breeders' Society of South Africa,
- (i) The Hereford Cattle Breeders' Society of South Africa,
- (j) The Clydesdale Horse Society of South Africa,
- (k) The Hackney Horse Society of South Africa.

Stud-book of Thoroughbred Horses of South Africa.

The Nurserymen's and Seedsmen's association of South Africa, which has Natal, Eastern Cape and Western Cape branches.

The Western Province Beekeepers' Association.

The Co-operative Wine Farmers' Association of South Africa.

The Natal Sugar Association and the Zululand Planters' Union.

The South African Maize Breeders', Growers' and Judges' Association.

The South African Poultry Association to which 51 poultry clubs are affiliated.

The Cape Province Judges' Association and the Agricultural Judges' Association of the Orange Free State.

The South African Creameries' Association and the Cheese Manufacturers' Association of the Cape.

The Transvaal and the Natal Fruit Growers' Associations, the Bathurst Farmers' Union, the Groot Marico, the Western Province, the Paarl and the Low Veld Farmers' Associations, the Wolhuters Kop Citrus Association, and the Constantia Fruit Growers' Association.

An important function of the associations is to organize agricultural shows, of which the most important are those held by the Western Province Agricultural Society at Rosebank, the Port Elizabeth Agricultural Society at Port Elizabeth, the Central Agricultural Society at Bloemfontein, the Witwatersrand Agricultural Society at Johannesburg, the Pretoria Agricultural Society at Pretoria, the Royal Agricultural Society at Pietermaritzburg, and the Durban and Coast Agricultural Society at Durban.

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4. PIG BREEDERS' SOCIETY. — *The Farmers' Weekly*, Vol. XVIII, Nos. 441, 443 and 447. Bloemfontein, 20 August, 3 September and 1 October 1919.

On 19 September 1919 the inaugural meeting was held at Bloemfontein of the Pig Breeders' Society of South Africa, the principal objects of which are to encourage the importation into and breeding in South Africa of pure-bred pigs of all recognized breeds and to arrange for the registration and publication of the pedigrees of pure-bred sows and boars, either through the medium of the South African Stud Book or in the form of a separate herd book. The council of the society will consist of two representatives of each of the four provinces of the Union and also of Northern and Southern Rhodesia. Moreover each of these provinces and territories will have the right to elect an additional representative for every fifty or fraction of fifty members it contains beyond the first fifty.

SWITZERLAND.

CO-OPERATIVE AGRICULTURAL CREDIT IN 1918. — *XVI^{ème} Rapport annuel de l'Union Suisse des Caisses de Crédit Raiffeisen, Année 1918*, Lausanne, Dr. A. Bovard-Giddey, 1919.

Our issue for August-September-October 1919 included an article on the development of co-operative agricultural credit from its origin until 1917. We have now data as to this branch of Swiss rural co-operation in 1918.

In 1918 co-operative agricultural credit in Switzerland increased as in no previous year. The growth of the Raiffeisen banks between 1917 and 1918 is shown by the following figures :

Year	Number of		Outgoings and incomings	Balance	Number of savings depositors	Savings deposits	Reserve
	banks	members	Francs	Francs		Francs	Francs
1917	208	14,904	115,486,946	46,552,374	41,739	21,434,105	927,718
1918	224	16,667	198,917,798	65,864,025	48,238	30,237,432	1,125,162

Between 1917 and 1918 the balance increased by 43 per cent.

The Central Bank of the Swiss Union of Raiffeisen Banks developed as follows between 1917 and 1918 :

Year	Outgoings and incomings Francs	Balance Francs	Capital Francs	Reserve Francs
1917	82,528,267	8,118,179	383,000	37,000
1918	147,453,607	12,812,316	512,500	49,000

The balance of the Central Bank increased between 1917 and 1918 by 58 per cent.

A communication from the Department of Agriculture of the Canton of Vaud, dated at Lausanne on 10 November 1919, shows that in this canton there are eight banks which do not belong to the Swiss Union of Raiffeisen Banks although they are members of the Federation of Mutual Credit Banks of the Canton of Vaud. The following are the figures as to these eight banks in 1918 : membership, 520 ; total incomings and outgoings, 14,676,998 francs ; balance, 2,661,574 francs ; savings deposits, 1,328,173 francs ; reserve, 42,555 francs.

Part II: Insurance and Thrift

AUSTRIA.

THE DEVELOPMENT OF THE LIVE STOCK INSURANCE INSTITUTE OF LOWER AUSTRIA (HORSE SECTION) FROM 1914 TO 1918

by HERMANN KALLBRUNNER, agricultural engineer.

The Horse Section of the Live Stock Insurance Institute of Lower Austria had during the war a development like that of the Cattle Section (1).

The Horse Section was much affected by all the influences which we described in dealing with the Cattle Section, perhaps even more so than this latter section, as appears especially in the large numbers of losses for which compensation was paid.

In Table I the fall in membership and in the number of insured horses and the almost unbroken rise in the losses appear clearly (2).

The changes in the number of insured horses (column 5) are particularly interesting.

According to the table this number at the end of the last business-year of peace, 1912-13, here given for the purposes of comparison, was 57,108 and on 31 July 1914 it was 58,696.

According to the results (namely the official data in the *Viehstandslexikon der im Reichsrate vertretenen Königreiche und Länder*, Vol. I, Vienna, 1913) of the last cattle census, taken on 31 December 1910, there were then 145,107 horses in Lower Austria. If there were meanwhile no change in this number about 40 per cent. of the horses were insured at the end of July 1914.

(1) See our issue for January 1920, pages 21-31.

(2) The data reproduced are taken from the annual reports by the Provincial Insurance Institute of Lower Austria to the provincial government of Lower Austria, included in the shorthand reports of the *Landtag* of the grand-duchy of Austria below the Ems.

TABLE I. — *Situation of Provincial Live Stock Insurance Institute (Horse Section) of Lower Austria.*

Year	Year of business since foundation	Number of local federations	Membership	Number of insured horses	Value insured	Average value of an insured horse	Compensation paid				Percentage of total insured number lost	Receipts for carcasses	Average receipts for a carcass	Total compensations	Average value of horse for which compensation was paid
							Anticipated number of slaughtered horses	Number of horses slaughtered for trade	Deaths	Total					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1912-13 .	13	862	26,703	57,108	48,087,450	754	763	658	1097	2512	4.4	177,781	71	1,212,097	672
1913-14 .	14	870	27,867	41,246	31,036,430	769	731	769	1148	2651	5.09	171,160	65	1,270,712	672
1914-15 .	15	881	28,639	44,252	37,515,450	848	754	252	1463	2463	5.58	151,218	61	1,306,034	731
1915-16 .	16	865	28,234	42,324	40,390,800	943	704	37	1196	1937	4.52	164,515	85	1,789,646	848
1916-17 .	17	860	21,531	40,013	45,507,030	1113	1181	81	1391	2513	6.30	369,949	145	2,078,106	814
1917-18 .	18	877	20,407	33,143	47,016,180	1410	959	34	811	1804	5.41	350,846	289	1,799,014	1247

N.B. The average insured value of a horse was nearly doubled during the year while market values were multiplied by ten or more. The conservatism of peasants, the fear of much higher premiums, the tendency always to insure an animal at its purchase-price at the time of insurance, and the careful and cautious conduct of the Institute explain this fact.

Owing to the mobilization of the most valuable horses in the first days of August, the number of the insured horses had an extraordinary fall. Immediately however there were a number of entrances into the Institute which partly compensated for withdrawals, so that at the end of the business-year 1913-14, on 30 September 1914, the insured number of horses was 44,246. The entrances in the year 1914-15 were still so numerous as not only to compensate for the further calls of the army, the many losses and the normal diminution, but also to cause the number of the insured animals to rise slightly until the end of the year 1914-15.

The increase in the number of insured horses was a consequence of the adherence of new members, who with rising prices and in the uncertain circumstances had recourse to the Institute to which they had hitherto been indifferent, and who sought to continue the work of their farms or industries by buying horses to replace those they had given up, wherever they could find them and at prices which rose by leaps and bounds.

In 1915-16 the new insurances of horses were much less than the withdrawals. The continued requisitions, the economic need, the incredible difficulty of finding fodder and the high prices of horses, made it impossible for many farmers to carry on their farms in the wonted way. They, especially those attending to the transport of persons, gave their farms up, or they managed as best they could with draught-oxen.

In the following years the number of insured horses fell further, for the causes enumerated held good. To them was added the fact that the

interest in insurance gradually lessened because the feared war epidemics did not appear, while with the increasing difficulty in keeping horses came a rise in the price of meat which made it possible so well to realize the value of slaughtered horses that the receipts for such were generally as high as, and sometimes even higher than, the compensation which would have been paid by the Institute.

The increased interest in insurance followed by a diminution in this interest is shown yet more clearly in the changes in the Institute's membership (column 4).

In column 7 the marked and constantly increasing average insured value of a horse is clearly expressed, and this together with the number of insured horses determined the rise in the insured value (column 6).

The newly bought horses, often bought without choice — otherwise they would have been taken over by the military authority — had to do the same work as the strong animals they replaced. Naturally these inferior and overworked horses which often, because the good horsemen and drivers had been conscribed, were looked after by substitutes, were exposed to bad risks. The selection which the military authority made among the horses previously insured was also contrary to the interests of the Institute, for all good and useful material was taken away and only what was inferior remained. Horses which were still capable of doing light work in favourable conditions, but had deteriorated with age and long years of work, suddenly rose in importance and value and had to do work for which they were not suited.

Oats, almost always scarce in the war years, were requisitioned by the military authority; other nourishing kinds of fodder were lacking or were of the worst quality, or, if their quality were adequate, were to be had only in insufficient quantities. The consequence was that the percentage of the number of insured animals which was formed by that of those lost rose (column 12 in Table I) and remained unprecedentedly high.

This percentage was as follows in the various years:

1900-01	1.90 per cent.
1901-02	3.02 " "
1902-03	2.91 " "
1903-04	3.47 " "
1904-05	3.79 " "
1905-06	3.25 " "
1906-07	3.93 " "
1907-08	3.73 " "
1908-09	4.31 " "
1909-10	4.59 " "
1910-11	4.70 " "
1911-12	4.09 " "
1912-13	4.40 " "

1913-14	5.99 per cent.
1914-15	5.58 " "
1915-16	4.52 " "
1916-17	6.30 " "
1917-18	5.41 " "

The number of the losses is shown in columns 7 to 11 of Table I.

The comparison of the causes which determined losses in the various years of the war is interesting.

The scanty feeding of horses and the large amount of work exacted from them, even on Sundays and holidays, so that they were never left long in stables, led to a fall in the losses due to disury.

Excessive work, underfeeding, unskilled care, bad roads, etc., led to an increase in the losses due to the breaking of bones and to accidents. The bad quality of the fodder caused many colics which were mortal; the insufficient fodder, deficient in nutritive elements, caused underfeeding. Cases of deaths occurred in which generally no change in the organs was discovered when the carcasses were opened, but in which there was a high degree of exhaustion, often combined with powerlessness in the muscles. There were of this description:

454 cases in	1915-16
864 " "	1916-17
685 " "	1917-18

Part of the increased liability for compensation was counterbalanced by the increased receipts for carcasses (Column 13 of Table I) (1). But the proportion of the compensation to which these receipts were equal was less than in the Cattle Section, because the rise in the price of horses was higher and more rapid than that in the price of meat and by-products. In the year 1918-19 the position first became like that in the Cattle Section, the need for meat determining the highest prices for horse-flesh while the price of horses underwent less change. Naturally the meat obtained, especially from horses which died of exhaustion, was seldom abundant.

In order to place the finances of the Institute on a sure basis, the premium-tariffs and the distribution of groups of risks had to be altered during the war and adapted to the changed conditions. On 1 October 1919 the premium-tariffs had again to be raised. The minimum insured value of horses used only for farming was raised from 1,500 crowns to 3,000 crowns and the minimum premium raised at the same time from 2 per cent. to 2.4 per cent. The maximum insured value of a horse was raised from 5,000 crowns to 15,000 crowns. Individual horses of particular value

(1) In the year which began on 1 October 1919 a premium for the utilization of carcasses, on the pattern of that in use in the Cattle Section, was to be introduced into the Horse Section.

can be insured with the Institute for a yet larger sum. Federations obtaining good results are to receive rebates.

By a strict classification of risks, a thorough individualization and a scientific examination of all important factors, it became possible, as is briefly shown in Table II, in spite of difficulties and enormously increased expenses, to maintain the financial position of the Institute in a good state.

TABLE II. — *Financial Position of the Provincial Live Stock Insurance Institute of Lower Austria (Horse Section) during the War.*

Year	Premiums received	Reserve funds	State of funds of district federations					Number of losses of district federations				
			I	II	III	IV	V	I	II	III	IV	V
			Vienna	District above Wienerwald	District below Wienerwald	District above Manhartsberg	District below Manhartsberg	1	2	3	4	5
1	2	3	4	5	6	7	8	9	10	11	12	13
1912-13	1,246,298	274,599	82,912	122,523	36,850	96,173	270,475	979	346	550	266	371
1913-14	1,274,013	332,360	108,460	126,005	44,851	94,920	298,495	919	370	598	327	437
1914-15	1,085,138	383,725	— 11,284	118,595	— 16,853	90,892	311,116	990	282	643	219	335
1915-16	1,245,386	431,943	+ 775	133,524	— 48,868	92,989	378,851	591	251	565	232	298
1916-17	1,508,648	496,231	— 187,841	128,986	— 128,835	79,195	406,238	972	309	662	251	359
1917-18	1,959,105	568,366	— 115,734	+ 183,812	— 4,545	119,558	558,702	923	170	329	142	240

It should be noticed as to Table II that with the rise in insured values and in risks, as expressed in their classification, there is, in spite of the lessened number of horses, a rise in receipts from premiums. The fall in the year 1914-15 is to be attributed to the extraordinary fall in the number of insured horses while the old premium-tariffs obtained and while values had not yet risen very importantly.

The reserves are shown separately, taking into account the division into five district federations (*Kreisverbände*). These federations, which reinsure with the Institute, have developed very differently although they all show almost the same number of insured horses.

Federations I and III, which include Vienna and industrial districts, rich in towns and containing few farms, show throughout a very high number of losses. In these districts an owner of horses cannot feed and keep them as well as a peasant, and this was particularly the case during the war in which enormous prices were asked even for inferior fodder, of which moreover only quite inadequate quantities were to be had.

The losses of federations II, IV and V, in which country owners of horses predominated, remained comparatively small.

The comparatively larger number of losses necessarily, owing to the increased value of the animals, weighed very heavily on the resources

of the Institute and the federations, as appears clearly in our figures. The decrease of the funds was covered by supplementary premiums.

It should be noticed finally that the Horse Insurance Section of the Provincial Live Stock Insurance Institute of Lower Austria between the date of its foundation and 30 September 1918 paid 17,616,986 crowns in compensation for 35,233 cases of loss.

The rules of this section had to be subjected to a revision, which was however of no great importance, on the basis of the new Austria insurance law of 1917.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

MUNICIPAL INSURANCE AGAINST HAIL IN ALBERTA AND SASKATCHEWAN IN 1919 (1). — *The Grain Growers' Guide*, Winnipeg, 1 and 8 October 1919; *The Farmers' Advocate and Home Journal*, Vol. IV, Nos. 1409 and 1412, Winnipeg, 24 September and 15 October 1919; *Canadian Finance*, Vol. X, No. 18, Winnipeg, 17 September 1919.

Alberta. — On 15 June 1919 the value insured in Alberta under the Municipal Hail Insurance Scheme was about \$16,000,000. Drought, cut worms and other causes led to the withdrawal of about 500,000 acres from the scheme before 20 July, so that the value which remained insured throughout the season was about \$12,000,000.

Under the new Act, described in our issue for January-February 1919, a farmer may insure his crop either for \$6 or for \$8 an acre. It is interesting to notice that over 93 per cent. of the 1919 insurance was at the rate of \$8 an acre.

The total losses for the year were \$506,000 or slightly more than 4 1/2 per cent., as against a little more than 2 1/2 per cent. in 1918.

The premium rate was fixed by the board at Calgary in October 1919 at 6 per cent., provision being made for the payment of all benefits in full, for the payment of all expenses up to date and the estimated expenses up to the end of the financial year, and for a surplus of about \$100,000.

On lands withdrawn from insurance after 15 June a rebate of a proportionate amount of premium was allowed.

In Saskatchewan. — The amended Municipal Hail Insurance Act having, as we have stated in a previous issue (2), allowed an excess hail insurance rate to be levied on all land under cultivation of one owner

(1) For earlier notices of this insurance see our issues for May 1917, page 37; January 1918, page 37; January-February 1919, page 42; May 1919, page 262.

(2) See our issue for May, 1919, page 262.

in excess of 40 acres, the annual convention, held in Regina in March 1919, resolved to recommend to the Board of Directors "that provisions be made to levy a seeded acreage assessment, if necessary, to meet the losses and expenses in full for the year 1919, provided such assessment does not exceed 25 cents per acre." The Board decided accordingly that the additional rate should be levied if it were needed.

The year 1919 proved to be one of heavy losses by hail: in September it was estimated that the indemnities payable would amount to \$1,950,000. The flat rate of 4 cents an acre, levied in all the municipalities adopting municipal insurance against hail under the original Act which introduced insurance of this kind, was expected to produce \$800,000. As the area liable to the excess rate was estimated as about 6,000,000 acres, it was calculated that this rate must be one of 22 cents an acre, which would produce \$1,320,000, bringing the total sum available for paying indemnities and expenses up to \$2,120,000.

The high level of this rate produced discontent, and some agitation in various municipalities for withdrawal from the municipal hail insurance scheme. The year was unfortunately one in which crops were injured not only by hail but also by drought, wind, grasshoppers, insects and gophers. To those who were dissatisfied it was pointed out that they had had, under the 1919 amendment, the option of withdrawing their land from the liabilities and benefits of the insurance down to 15 June.

REGENCY OF TUNIS.

INSURANCE AGAINST HAIL, BY NATIVE THRIFT SOCIETIES. — Reports on the business done by the native thrift societies in 1918. Tunis, 1919.

A decree of 31 March 1919 organized insurance against hail for native cultivators who are members of Native Thrift Societies.

The originality and the advantage of the insurance which this decree institutes consist in the fact that it makes no formality or writing necessary. All the information which is necessary to the working of the scheme (name of cultivator, kind, situation and area of crops) is already contained in the documents used for assessing the *achour* tax.

The ascertaining of the damages occasioned by hail is merged in the valuation which the taxation agents have to carry out with a view to making deductions from the *achour* tax. Thus a considerable simplification and economy are effected. The benefit allotted to those suffering losses is fixed contractually at twenty times the *achour* tax which would have been incident on the crop if it had not been damaged. Since the tax is equal to about one twentieth of the value of the harvest, the benefit should cover the whole loss. When necessary a sum equal to twenty times the tax incident on the damaged crop is deducted from the sum of the benefit calculated as described.

Further, in order to reduce working expenses and in order to observe the rule that benefits are calculated on the amount of the *achour* tax, these

benefits, like the tax, increase proportionately to yield only until the latter has reached 6 hectolitres.

This insurance is all the more profitable to the persons insured because it does not imply the payment of a special subscription. The insurance fund intended to meet the payment of benefits is made up of the eight centimes, already paid under the decree of 31 Decembrer 1919, which constitute an addition to the *achour* tax quotas due from members of the Native Thrift Societies.

Such assignment of these additional centimes has been made possible by the flourishing financial condition of the societies.

These resources, which amount in an average year to about 200,000 francs, might be insufficient to pay all the benefits falling due. The decree provides that in such a case all benefits shall be proportionately reduced. If, on the other hand, the centimes paid as additions to the *achour* are not entirely absorbed by the benefits due, their surplus will be carried over to the next year and increase its funds.

The insurance which the decree of 31 March 1919 establishes constitutes an experiment. If its results justify such a course it may be made general, being extended to cover the risks of grain harvests of more than 6 hectolitres, and such other agricultural risks as those which olive and date-trees incur from hail, the risks of fire and those of mortality among live stock, etc.

RUSSIA.

THE ALL-RUSSIA CO-OPERATIVE INSURANCE UNION. — *The Russian Co-operator*, Vol. 3, No. 11, London, November 1914.

Some of the leading co-operative organizations, such as the Moscow Union of Consumers' Societies (now the "Centrosoyus"), the Central Association of Flax Growers, the Union of the Siberian Creamery Associations, the Popular Bank of Moscow and some others, have of late years set up their own insurance departments, and carried on this kind of business for their members.

The "Centrosoyus" began its own insurance operations in June 1918, and during the period up to January 1919 it issued 995 insurance policies for a total sum of over 60 million roubles.

Considerable insurance business was done by the Central Association of Flax Growers, which in April 1918 began to insure for its own risk the flax and other property belonging to its members. By the end of that year the Association had carried through various insurance transactions for a total sum of 114 million roubles, of which 92 million were in respect of risks on flax, 21 million in respect of various goods, and the balance covered real and other estate of its members.

The Popular Bank of Moscow initiated insurance transactions in October, 1917, and conducted them on an ever-increasing scale for a period of about one year. The total number of insurances effected by the Bank amounted to 376, for a total of 78.5 million roubles. All the above

organizations have in turn reinsured their risks in some insurance society, and the ground was thus gradually prepared for the formation of a central co-operative insurance organisation. Such an organization was finally set up in October, 1918, when the All-Russia Co-operative Insurance Union was formed and the Popular Bank of Moscow transferred to it the insurance business which it was doing.

The objects of the new Union are "to organize and effect insurance against fire and against risks connected with the transport of the property of co-operative societies."

In order to further this work the Union intends, in addition, to promote the development of anti-fire measures and the erection of fireproof buildings in the interests of its members, and to assist in every possible way the spread of measures tending to decrease risks from fire and during transport. Indirectly the formation of the new Union aims at reducing the cost of insurance and at placing at the disposal of the co-operative societies the huge capital accumulated through the business of insurance.

The capital of the Union is composed of 2,600 shares representing 2,600,000 roubles, the principal shareholders being the Popular Bank of Moscow (1,000 shares), "the Centrosoyus" (500 shares), the Central Association of Flax Growers (300 shares), and the Union of Siberian Co-operative Unions ("Zakupsbyt") (200 shares). The remaining shares have been allotted to a few central and some large provincial unions of co-operative societies: the Central Association of Fruit Growers and Market Gardeners, the "Co-operative Grain," the Central Association of Hemp Growers, the Voronezh Union of Credit and Loan and Saving Associations and some others.

The liability of the Union extends to all its capital and property, while its members bear an additional liability to the extent of three times their share holdings. The membership of the Union is open to central and provincial unions and combinations of co-operative societies, individual societies and local unions being admitted only in exceptional cases. The members may organize their own insurance and reinsurance of their property, but they must undertake not to place their insurance business with any other insurance society. The local representation and agencies of the Union are entrusted to local co-operative societies only.

Not less than 20 per cent. of the net profits for any year must be placed to the reserve capital, but after the latter has reached the sum of five million roubles the yearly proportion can be reduced. The rules affecting the distribution of profits of the Union provide that the dividends on the shares can be no higher than 8 per cent., the balance being used for increasing the reserve capital and various special funds, for the refund of part of the premiums paid by the members, and for furthering anti-fire measures and other co-operative and social objects.

During the first two months of the work of the new Union it issued insurance premiums for the amount of 29 million roubles and accepted re-insurance risks amounting to 44 million roubles. During December 1918, the insurance transactions effected amounted to 2.25 million roubles

in respect of direct insurance and to 22 million roubles in respect of reinsurance. During January and the first half of February 1919, further insurances for over 120 million roubles were effected bringing the total of policies issued by the Union to 256, and their value to 80 million roubles in respect of direct insurance and to 258 policies and 185 million roubles in respect of reinsurance. Thus the total number of policies issued was 514, representing liabilities amounting to 265 million roubles. Of this sum some 104 policies worth 85 million roubles were further reinsured in other insurance institutions.

The share capital of the Union was increased during the same time to 4,900,000 roubles. The balance sheet of the Union on the 1 February 1919 showed a total of 6,418,231 roubles.

Assets.

	Roubles.
Cash and current accounts	4,915,675
Furniture, etc..	84,748
Current expenses.	476,317
Paid in respect of risks	149,516
Various debtors and sundry assets. . .	791,975
Total . . .	6,418,231

Liabilities.

	Roubles.
Share capital	4,900,000
Premiums on insurance.	1,423,075
Various creditors and sundry liabilities.	95,156
Total . . .	6,418,231

SPAIN.

THE HAIL INSURANCE SOCIETY OF NAVARRE (CAJA NAVARRA DE SEGUROS CONTRA EL PEDRISCO). — *El Previsor*, 35th Year, No. 703, Madrid, October 1919.

Two important associations of the province of Navarre, the Catholic Social Federation and the Vinegrowers' Association, simultaneously conceived the idea of forming a hail insurance society for the province. Hearing of this the Provincial Council invited both societies to send representatives to a meeting. It was found that the two associations were in agree-

ment on the principal points and they were asked to present to the Council joint proposals for the formation of a hail insurance society. The associations at first proposed that the Provincial Council should itself form and administer a hail insurance society, but the Council considered this too dangerous. It was then decided that the Council and the two associations should jointly form a hail insurance society which should be independent of the Council, but be subsidized and protected by it. A Committee was formed, consisting of representatives of the three bodies and a Provincial Councillor, resident in Pamplona, was nominated President.

Having been duly registered, the Hail Insurance Society of Navarre started work on 1 April 1918. Its offices at Pamplona were provided and furnished by the Provincial Council. A Manager and Assistant Manager were appointed, and both were placed under the direction of an Inspector Secretary.

In its first season the Society effected 3,826 individual and 16 collective insurances. The total capital insured was 13,538,020 pesetas and the amount received as minimum premiums was 173,193 pesetas. The total compensation paid was 101,002 pesetas, or 0.74 per cent. of the capital insured.

The Provincial Council gave the Society a subsidy of 833.50 pesetas per month, and subsidies of varying amounts were also received from local authorities. Up to the end of 1918, the Society had received in subsidies 9,545 pesetas. Interest received on sums deposited in the Crédito Navarro amounted to 3,588. The total working expenses amounted to 12,155 pesetas, or less than the total of subsidies and interest. A sum of 73,168 pesetas was set aside as a reserve fund.

There were only five days on which hailstorms occurred in Navarre in 1918, but the storms were very severe and the damage caused was considerable. The following table shows the dates on which hail fell, the total damage caused to agriculture in Navarre, and the amount of that damage which was covered by insurance with the Hail Insurance Society.

Date	Total damage done	Compensation paid by the society
	Pesetas	Pesetas
26 June	285,000	24,330
30 June	80,000	37,186
3 August	26,700	2,925
1 September	4,000	1,611
21 September	1,080,000	34,949
	1,475,700	101,002

The Society was fortunate in that the average loss suffered by its members was less than the average loss suffered by the farmers of the province as a whole. The damage done by hail in the province was 1.52 per cent. of

the total agricultural production, exclusive of roots and hay. Had the society been obliged to pay compensation in this proportion, it would have been necessary to levy a supplementary contribution equal to 19 per cent of the minimum premium.

A table was prepared showing the compensation paid according to the different crops. It appeared that the percentage of damage to vines was three times the percentage of damage to cereals, and this corresponds to the difference between the premiums fixed for vines and cereals respectively. Miscellaneous crops, however, which include capsicums, tomatoes, etc., were found to have suffered disproportionately and it is proposed to increase the premiums payable in respect of these crops.

Part III: Credit

SPAIN.

THE CREDIT BANK OF THE FARMERS' ASSOCIATION.

SOURCES:

CAJA DE CRÉDITO DE LA ASOCIACIÓN DE AGRICULTORES DE ESPAÑA: MEMORIA DEL EJERCICIO 1918. Madrid, 1919.

NUEVO REGLAMENTO DE LA CAJA DE CRÉDITO DE LA ASOCIACIÓN DE AGRICULTORES DE ESPAÑA. *Boletín de la Asociación de Agricultores de España*, No. 123. Madrid, August 1919.

The Credit Bank of the Farmers' Association of Spain was formed in March 1916 as a branch of the Farmers' Association. It is not separately registered and has no legal existence apart from the Association. Its principal objects are to promote rural banks, to provide them with the funds necessary to give the initial impulse to their operations, and to regulate the movement of capital amongst the societies affiliated to the Farmers' Association by accepting on deposit the excess capital of some and supplying with it the necessities of others.

§ 1. ORGANIZATION OF THE BANK.

Revised regulations were issued in 1919. According to these regulations the capital of the Bank will be variable. The minimum is 250,000 pesetas; which will be divided into 500 foundation shares of 500 pesetas each. These will serve, during the first five years, to guarantee the operations of the bank, but they will gradually be converted into ordinary shares. Interest not exceeding 5 per cent will be paid upon them.

The societies affiliated to the Farmers' Association can subscribe for ordinary shares and sums so subscribed will be devoted to paying off the foundation shares.

As long as there still remain foundation shares which have not been paid off, the balance of the net profits after payment of interest on the foundation shares, will be distributed amongst the societies who have done business with the Bank in proportion to the amount of such business during

the year. The profits so distributed will be credited to the societies in the form of deposits bearing interest at three per cent, but withdrawable only on the dissolution of the societies. Where the amount credited to a society reaches 500 pesetas, an ordinary share will be issued to the society and a foundation share will be paid off.

If at the end of five years the whole of the foundation shares have not been paid off, the General Meeting of foundation and ordinary shareholders will decide, on the proposition of the Executive Committee, how the initial capital is to be renewed.

When all the foundation shares have been paid off, 50 % of the net profits will be carried to the reserve and the remaining 50 % distributed amongst the societies which have done business with the Bank.

The Executive Committee of the Bank is composed of the President of the Farmers' Association and four members chosen by the foundation and ordinary shareholders from amongst the members of the Council of the Association who have taken up foundation shares.

§ 2. LOANS FOR SHORT TERMS.

Credit will only be given to societies which are affiliated to the Farmers' Association. Loans are divided into two classes, namely, loans repayable within a year and loans for longer terms.

Loans repayable within a year are given in the form of current accounts. The amount which a society may obtain as an overdraft will be determined by the Committee of the Bank after examining the solvency of the members (who will be jointly and severally liable) and the working of the society. The society must give to the Bank a guarantee signed by three members selected by the Committee of the Bank.

The society may confine itself to drawing the sums which it requires. In this event, the interest payable will be $5\frac{1}{2}$ per cent. If, on the other hand, it makes deposits as well, it will pay 5 per cent on debit balances and will receive $3\frac{3}{4}$ per cent on credit balances. If there has been no credit balance for six months, $5\frac{1}{2}$ per cent will be charged on the debit balances.

All existing current accounts will expire on 31 December in each year, but they may be renewed for a year at the request of the society.

Cheques drawn against current accounts will be paid by the Bank at sight up to 10,000 pesetas. If drawn for a larger amount, seven days' notice must be given.

§ 3. LOANS FOR LONG TERMS TO FARMING SOCIETIES.

Loans for more than a year are specially intended to supply working capital to co-operative societies which undertake the cultivation of land. They will only be granted to societies composed exclusively of agricultural labourers, and preferably societies formed by agricultural syndicates or other agricultural associations.

The parent association will inform the Bank as to the character of the

proposed undertaking, indicating the land which it is proposed to cultivate and stating its area and quality and the terms upon which it can be rented.

If the Executive Committee approves in principle of the proposal, it will appoint an expert, who will examine the land and, if he considers the undertaking feasible, will draw up a scheme, which the Committee will invite the co-operative society to consider. As soon as the expert and the co-operative society have come to an agreement, an account will be opened on behalf of the society for the total amount of the estimated expenses. The members of the society will make themselves jointly and severally liable for the amount of the credit, and the crops, live stock, machinery and implements will also be pledged as additional security. Interest at 5 % will be payable on the advance.

Only those who actually take part in the cultivation of the land can be members of the society. As an advance on their share of the profits, the society will pay them wages at the rates current in the locality. At the end of the year the net profits will be divided into two parts. One half will be paid to the Bank as part repayment of the loan and the other will be divided amongst the members of the society in proportion to the wages earned. If in any year there are no profits, the Bank will make good the loss, charging the amount to the society's account and repaying itself out of the subsequent profits of the society.

The Bank will supervise the management of the farm without making any charge for doing so beyond the travelling and subsistence expenses of its inspector. A foreman will be appointed by the society and the Bank in agreement. He must be a member of the society and will receive as his remuneration such share of the profits as may be decided.

The accounts will be kept by the foreman in such form as the Bank may stipulate. It will be obligatory for the society to insure the crops against fire and also against hail, unless the land is in a district where there is no risk of damage by hail.

§ 4. THE WORKING OF THE BANK IN 1918.

At the end of 1918 (before the new regulations came into force) the capital of the Bank amounted to 614,000 pesetas, of which 308,700 pesetas 50 centimos was guarantee capital; 304,799 pesetas 50 centimos was represented by securities deposited with the Bank of Spain as guarantee for a credit of 200,000 pesetas opened on behalf of the Credit Bank, while 500 pesetas was paid up.

The total loans outstanding, most of them being on current account, amounted to 279,154 pesetas 97 centimos and the total deposits in hand to 331,456 pesetas 57 centimos.

From time to time the Credit Bank, finding itself with a surplus in hand, had invested money in public funds and the total value of its investments at the end of 1918 was 180,702 pesetas 24 centimos. On the other hand, there was due to the Bank of Spain a sum of 131,678 pesetas 20 centimos which the Credit Bank had obtained as an overdraft.

The following is a condensed summary of the balance sheet at the end of 1918.

Balance Sheet, 31 December 1918.

Assets		Liabilities	
	Pesetas		
Sums guaranteed	305,700 50	Capital	614,000 00
Securities pledged	304,799 50	Over draft from Bank of	
Cash in hand	3,942 77	Spain	131,678 20
Investments	180,702 24	Deposits in hand	331,456 57
Loans outstanding	279,154 97	Other liabilities	498.46
Other assets	4,662 99	Balance	4,329 74
	<u>1,081,962 97</u>		<u>1,081,962 97</u>

Besides the Farmers' Association and the two societies formed by it for mutual insurance against hail and against accidents, the Credit Bank had business relations in 1918 with eighteen societies affiliated to the Farmers' Association. The total sums withdrawn amounted to 824,635 pesetas and the sums deposited to 868,755 pesetas. The interest paid by the Bank to the societies was 12,161 pesetas and interest received from the societies was 9,597 pesetas. The Bank also received interest on its investments to the amount of 7,690 pesetas.

After repayment out of the net profits of a sum of 1,997 pesetas paid by the Farmers' Association for the initial expenses of the Bank, and of a gratuity of 500 pesetas to the cashier, there remained for distribution amongst the societies 1,831 pesetas, equivalent to approximately 19 per cent. of the interest paid by them to the Bank.

The distribution of this bonus reduced the interest paid on loans to a rate slightly over four per cent.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE BANK OF THE PROVINCE OF BUENOS AYRES IN 1918 — *La Nación*,
February 1919

From a resumed report on 1918 issued by the directors of the Bank of the Province of Buenos Ayres we learn that this institution has continued to develop its wide and fruitful work for the advance of agricultural industries, giving to small and large farmers and to stock farmers ample facilities for obtaining credit.

The bank's capital rose in 1918 to 62,600,000 pesos and its reserve fund to 9,082,260 pesos.

General deposits, which amounted in 1914 to 107,450,000 pesos, reached, as we shall presently see, the sum of 265,815,000 pesos. In other words they increased by 168,365,000 pesos.

Year	Pesos
1914	107,450,000
1915	132,614,000
1916	171,149,000
1917	215,710,000
1918	275,815,000

The securities discounted and the advances on current account also increased considerably during these four years, reaching the sum of 226,054,000 pesos, whereas, as appears from the following figures, they had amounted to 129,000,000 pesos in 1914.

Year	Pesos
1914	129,000,000
1915	146,396,000
1916	168,500,000
1917	188,488,000
1918	226,054,000

Finally, total incomings and outgoings, which were 26,597,000 pesos in 1914, were 108,054,000 pesos in 1918.

The rapid constitution in the province of new branches of this bank, which now number 64, is notable.

The business transacted between these branches and the head-office reached the figure of 574,640,000 pesos, having increased by 292,380,000 pesos since 1914.

Business with foreign countries was more than doubled between 1916 and 1918, as appears from the following figures :

	1916 Pesos (Gold)	1918 Pesos (Gold)
Letters of exchange on foreign countries	16,135,000	34,707,000
Cheques and bills bought	3,923,000	10,020,000

The bank's mortgage credit, the management of its properties and its liquidation business have all been attended with success. Its profits amounted to 7,110,501 pesos.

CHILE.

THE MORTGAGE CREDIT BANK. — *La Información*. Santiago de Chile, August 1919.

The report issued by the Mortgage Credit Bank of Chile on its business in 1918 and on its position when it closed its books on the 31st of December in that year gives us data, which we will presently reproduce, as to the mortgage credit it afforded on urban and rural property.

Its transactions of this kind in 1918 numbered 563 and covered the total sum of 67,437,400 pesos in current money, whereas in 1917 they numbered 529 and covered the sum of 46,633,700 pesos in current money and £10,000 sterling.

Of these 563 transactions, 346 for 33,667,700 pesos were loans secured by urban property, while 217 for 33,759,700 pesos were loans secured by rural property. The latter were distributed as follows :

92 eight per cent. bonds	44,887,400 pesos
28 seven » » »	14,645,000 »
43 six » » »	7,905,000 »

In the same year bonds of the value of 33,768,200 pesos of current money, 13,353,500 in francs (gold) and £52,130 sterling, were paid off.

On 1 January 1918 this bank's balance for its mortgage credit business was as follows : 357,689,000 pesos of current money : 77,447,000 francs (gold) ; and £575,140 sterling. If we add to these figures those showing the business done during the year, we find that the total amortizations, as specified above, gave on 31 December 1918 the following total balance : 391,358,200 pesos of current money ; 64,093,500 francs (gold) and £523,019 sterling, as appears in the following table :

	Current money	Francs (gold)	£ sterling
Balance on 1 January 1918	357,689,000	77,447,000	575,140
Business done during 1918	67,437,400	—	—
Total	425,126,400	77,447,000	575,140
Bonds paid off during 1918	33,768,200	13,353,500	52,130
Balance on 31 December 1918	391,358,200	64,093,500	523,019

The situation of the business of the Mortgage Credit Bank on 31 December 1918 can be stated as follows.

	Loans	Value
On rural land	2740 loans	266,918,600 pesos (current money)
	34 »	8,300,500 francs (gold)
	6 »	£84,630 sterling
On urban land	4465 »	206,368,800 pesos (current money)
	76 »	7,804,000 francs (gold)
	8 »	£479,830 sterling.

This is to say that a total number of 7,205 loans of the value of 473,287,400 pesos of current money, a total number of 110 loans of the value of 16,104,600 francs (gold), and a total number of 14 loans of the value of £564,460 sterling, were made on urban and rural land.

ITALY

1. RECENT PROVISIONS AS TO AGRICULTURAL CREDIT. -- Decreto luogotenenziale 25 maggio 1919, n. 943, recante provvedimenti per il credito agrario nelle provincie del Veneto danneggiate dalla guerra. — R. Decreto 20 luglio 1919, n. 1414, che aumenta il fondo stanziato per anticipazioni agli Istituti di credito agrario. *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 145, 19 June 1919, and No. 1414, 20 July 1919

By a lieutenantcy-decree of 20 February 1918, No. 318 (1), a fund of 60,000,000 liras was granted for advances to be made to institutions of agriculture prepared to do credit business in the Venetian provinces which suffered by the war. By subsequent decrees, of 25 May 1919, No. 943, and 20 July 1919, No. 1363, this fund was increased by other 40,000,000 liras.

In virtue of these decrees agricultural and ordinary and co-operative credit institutions, ordinary savings-banks and *Monti di pietà* are authorized to grant loans to the farmers of Venetia for their farming, for ordinary tillage, harvesting and the utilization and conversion of produce. Such loans will enjoy the privilege given by Articles 9, 10 and 11 of the lieutenantcy-decree of 10 May 1917, No. 788 (2), will mature in not more than two years, and must be repaid not later than 31 December 1921.

The loans for the acquisition of implements of labour, live stock and agricultural machinery will mature in not more than ten years and will be totally repaid by annual instalments not later than 31 December 1930. These loans and the documents having reference to them are exempt from all taxes and stamp and registration duties. The rate of interest to be paid by farmers on the loans made to them by the aforesaid institutions may not exceed 3 per cent.

To help the reconstruction of Venetia, the Federal Institute of Credit (*Istituto federale di credito*) (3) has also been constituted. Its aim is to contribute to the rapid repairing of damage wrought by the war, either by granting advances of the compensation for war losses which is in course of

(1) *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 69, 21 March 1919

(2) See in this connection our issue for December 1917, page 38.

(3) *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 89, 14 April 1919.

being fixed or of being paid by the State, or by making advances or loans to societies, businesses or individuals who are engaged on works of reconstruction or of reclamation of land these advances to take the form established by the law on agricultural credit. The Institute was founded with an initial capital of 25,000,000 liras, to which savings-banks, popular banks and institutions of thrift contributed. It is governed by a managing committee, responsible for maintaining its unity of direction, of guiding principles and of methods, and this committee makes provision for an equal and proportionate distribution of credit among provinces, having regard to the damage they have suffered by the war.

These provisions are applicable only to the Venetian province. By a decree of 20 July 1919, No. 1414, the fund for general agricultural credit was subsequently increased by other 20,000,000 liras. This sum will be distributed among agricultural credit institutions to enable loans to farmers in the farming years 1919-20 and 1920-21, special regard being paid to the increased cultivation of grain, vegetables and root-crops for human consumption.

This last assignment has brought up to 205,000,000 liras the sum available in Italy for the agricultural credit which is and will be afforded to small farmers by preference.

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2. AMENDMENT OF THE LAW OF 31 MARCH 1904 AS TO AGRICULTURAL CREDIT FOR BASILICATA -- Decreto-legge luogotenenziale n. 1190, 22 giugno 1919, che apporta modificazioni alla legge 31 marzo 1904, n. 140, sul credito agrario per la Basilicata. *Gazzetta Ufficiale del Regno* 12 luglio 1919, Rome, N. 176, 24 July 1919.

The affording of agricultural credit is entrusted in Basilicata to the Provincial Bank of Agricultural Credit for Basilicata (*Cassa provinciale di credito agrario per la Basilicata*), which is situated at Potenza, constitutes an *ente morale* (corporation having non-commercial aims), and is one of the institutions with which the special administrative department for agricultural credit in the Bank of Naples can do business.

On the basis of the law of 31 March 1904, No. 140, which governs this Provincial Bank, and the amendments to that law contained in the law of 9 July 1908, No. 445, and in the recent lieutenantcy decree-law of 22 June 1919, No. 1190, the bank is authorized :

(1) To make loans to landowners, tenants by emphyteusis and farmers in Basilicata, individually or as united in associations, (a) for making farm roads, for erecting buildings as dwellings for cultivators and their families, shelters for live stock, and warehouses for provisions and agricultural produce and handling the latter, for providing drinking water, for irrigation and the transformation of crops, for every other kind of land improvement and farming improvement, and for enterprises of land settlement ; (b) for the redemption of rents and dues, and for acquiring the land necessary

to small agricultural holdings; (c) for acquiring live stock, agricultural machinery and implements and land; (d) for the farming of land, its ordinary cultivation, harvesting, and the utilization and conversion of crops.

(2) To make advances to *monti frumentari*, agricultural consortia and agricultural banks for the purposes mentioned under (c) and (d).

(3) To make advances on pledged agricultural produce deposited in general warehouses or other public or private depositories;

(4) To receive cash deposits, rediscount paper, discount bills, open current accounts for individuals and institutions, and, with the approval of the Ministry of Agriculture, to do every other kind of business ministering to the aims of the Institute.

The loans mentioned under (1) (a) are granted gradually as the works proceed. The loans mentioned under (b) are secured by a special lien and a mortgage and are amortizable by half-yearly instalments paid within a period not exceeding 30 years. The loans mentioned under (c) are secured by a lien and mature in five years at most. The loans mentioned under (d) are also secured by a lien and mature at harvest time. On the loans mentioned under (a) and (b) interest is paid at the rate of 2 ½ per cent. Interest is paid on the other loans at a rate which is fixed by the Provincial Bank in agreement with the Ministry of Agriculture, but which must not exceed the official rate of discount.

3 THE "CREDITO AGRARIO PER IL LAZIO" IN 1918. *Relazione sull'esercizio 1918*, Rome, 1919.

This "Institution of Agricultural Credit for Latium" affords agricultural credit for the work of farming (law of 21 December 1902, No. 542, and lieutenantancy-decree of 12 June 1919, No. 997), either through intermediary societies (agricultural consortia, rural banks, co-operative popular banks and other legally constituted bodies) active in the province of Rome, or directly to individual farmers living in places in which there are no intermediary societies or in which these cannot work.

In 1918 the "Credito Agrario per il Lazio" effected altogether operations for 9,554,452 liras, most of them through intermediary societies among whom operations for 7,507,171 liras were distributed as follows:

Agricultural consortia	4,287,836.41 liras
Various societies affording agricultural credit . . .	2,574,240.90 "
Co-operative popular banks	372,990.02 "
Agricultural universities	160,533.00 "
Agricultural and rural loan banks	80,571.00 "
Distillery and winemaking societies	31 000.00 "
	<hr/>
	7,507,171.33 "

These loans had the following objects :

Grain growing	2,825,311.35	liras
Vine growing	1,718,411.22	»
Sulphate of copper, sulphur, various manures. . .	1,000,528.80	»
Stock breeding.	718,412.00	»
Various crops	705,418.30	»
Agricultural implements and machinery	323,782.26	»
Olive growing	215,307.40	»
	7,507,171.33	»

Operations with farmers directly amounted to 2,047,281 liras, and were distributed by kind of operation as follows : advances on pledged agricultural produce, 1,413,700 liras ; advances with lien on seeds, 414,500 liras ; direct simple discount, 398,554.75 liras ; rediscount of bills, 90,527 liras.

The objects of these loans were as follows : grain growing 1,318,411 liras ; stock breeding 315,318.80 liras ; vine growing 212 216.75 liras ; various crops 114,613.35 liras ; olive growing 50,300.20 liras ; sulphate of copper, sulphur and various manures 36,418.35 liras.

The rate of interest on transactions with intermediary societies was fixed at 6 per cent. and on transactions with farmers at 7 per cent.

In the year we are considering there was also a notable increase in the savings deposits received by the Institution, which exceeded four million liras, and increased the available capital, thus making a vaster and more efficacious programme of work on behalf of the farmers of Latium possible. The managing committee in its report, which we have already cited, expresses a desire to be authorized to make loans for agricultural improvements, transformations of crops, and the acquisition of small holdings with a view to promoting the subdivision of the large properties. All these kinds of business are recognized as necessary to agricultural development in Latium.

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4. THE BANK OF AGRICULTURAL CREDIT FOR TUSCANY IN 1918. — *R lazione del Consiglio di amministrazione della Banca di Credito agricolo per la Toscana per l'anno 1918.* Florence, 1919

From the report for 1918 on this bank, which has existed for only five years but has attained to a remarkable degree of development, doing a beneficent work for the farmers of Tuscany, we reproduce the following data as to its activity in that year. *Membership* — at first (October 1913) 25, holding 60 shares for 6,000 liras ; on 31 December 1918 had risen to 495, holding 1116 shares representing 111,600 liras of paid-up capital. *Business done* — in 1918, 2,043,641 liras were placed at the disposal of the farmers of the district, this sum having increased, by 358,562 liras since the previous year. *Current accounts* — deposits on current account amounted on 31 December 1917 to 136,581 liras and on 31 December 1918 to 398,720

liras. Altogether, in the year we are considering, 2,190,158 liras were deposited in the bank as against 878,926 liras in 1913. *Various activity* — In so far as difficulties due to the war allowed, the work was begun of organizing the installation of two agencies of the Bank at San Giovanni in Valdarno and at Livorno. Work undertaken on behalf of the National Institute of Credit for Co-operation to promote the institution of co-operative societies for the improvement and settlement of uncultivated land, and of an office of advice and assistance for agricultural co-operative societies, was also important and successful.

SPAIN.

A NEW AGRICULTURAL BANK. — *Revista de Economía y Hacienda*, 22nd Year, No. 42
Madrid, 18 October 1919

A new bank has been formed in Madrid with the title of Industrial Agricultural Bank and Mortgage Savings Bank (*Banco Industrial Agrícola y Caja de Ahorros Hipotecaria*). Amongst other work which the Bank proposes to carry out are the making of advances to farmers at moderate rates of interest for productive purposes and the granting of long-term mortgage loans to enable them to purchase their lands, to redeem charges, or to make permanent improvements.

The capital of the Bank is 25,000,000 pesetas. Branches will be established in all the provincial capitals.

Part IV: Agricultural Economy in General

FRANCE.

THE STATE CONTRIBUTION TO AGRICULTURAL RECONSTRUCTION IN THE LIBERATED DISTRICTS.

SOURCE (OFFICIAL):

CHAMBRE DES DÉPUTÉS: RAPPORT FAIT AU NOM DE LA COMMISSION CHARGÉE D'EXAMINER LE PROJET DE LOI PORTANT FIXATION DU BUDGET ORDINAIRE DES SERVICES CIVILS DE L'EXERCICE 1919 (AGRICULTURE), PAR M. ADRIAN DARIAC, DÉPUTÉ (SESSION DE 1919, SÉANCE DU 22 MAI 1919, ANNEXE N° 6161).

§ 1. THE OFFICE OF AGRICULTURAL RECONSTRUCTION.

As early as the autumn of 1916, the Minister of Agriculture realized the necessity of stocking supplies for the farmers of the liberated districts, and of regulating prices which competition between purchasers would otherwise have raised beyond all limits. He therefore instituted an interdepartmental commission, charged on the one hand with estimating after-war needs, as regarded the quantity and kind of the goods wanted, and on the other with finding builders able to supply the recognized needs. This organization was at work when the law of 3 August 1917, which erected the Office for the Agricultural Reconstruction of the departments which had been invaded, was passed.

Decrees dated 1 October 1917 regulated the organization of the office and appointed the members of the managing council, of whom half were farmers coming from the departments which had suffered and half representatives of the ministries concerned.

The managing council holds a full meeting once a month, and the permanent committee meets once a week, if necessary, to give its advice on current business.

The office has depended since 13 December 1917 on the Ministry of the Liberated Districts.

Its interior organization is as follows:

The following departments work under the authority of the general secretary and his assistant who are in direct touch with the ministry:

(1) The department of study and information, which is charged to carry on technical studies, and to give information to the departments of other ministries and to the farmers who have suffered loss.

(2) The provisioning department which has three sections:

(a) Supplies section, with a subsection for machinery and implements and another for vehicles and harness;

(b) Seed, plant and manure section;

(c) Horse and other live stock section.

These three sections find supplies and draw up the contracts submitted for the approval of the managing council and the signature of the minister.

Hitherto labour and primary supplies have been lacking, but it seems that the situation must presently change. The supplies for which there was no immediate use have been stored in a central depository. The supplies section otherwise organizes, with means which hitherto have unfortunately been limited, centres for restoring and repairing the implements which are still to be found in the wasted districts.

The horse and live stock section undertakes the distribution of army horses among the farmers interested, notably that of brood mares. In this connection it has relations with the British and American military authorities.

The reconstitution of flocks and herds also receives this section's attention, and it has entered into treaty with Switzerland for help in this work in the eastern departments, with Holland as regards the other districts, with America as regards all the districts interested, with Algeria for sheep, and with various departments for goats. The largest contribution has naturally consisted of selected live stock from the French interior. The minister, in agreement with the Minister of Agriculture, has drawn up the list of the restitutions in kind which are to be demanded from Germany.

The seed and plants section works in agreement with the national nurseries of Versailles and with the army market gardening department in order to supply farmers with large quantities of plants at reduced prices. Its essential work is however the passing of contracts with good farmers in the interior of the country by which these engage to give up a certain number of hectares to growing grain of kinds suited to the districts concerned. Thus at harvest-time several thousand hectares will allow the first need for seed to be met in a way tending to the agricultural improvement of the districts restored to productiveness.

(3) Side by side with the department of study and information and the provisioning department there are a contentious matter department, which is charged to examine contracts and agreements from the legal point of view, and an agricultural associations' mission. The latter sends delegates wherever it is possible to organize farmers into co-operative production societies, since these are the only organizations which can facilitate the consolid-

ation of holdings, the use of motor traction and, in general, profitable farming with minimum resources.

(4) Book keeping, finally, constitutes a special department.

In concluding this brief description of the office a few words must be said as to the societies of commissaries (*sociétés de tiers-mandataires*) organized or being organized in each of the departments which has suffered. For many reasons the office could not satisfy all the farmers, and if it makes wholesale purchases the retail distribution must indispensably be effected by organizations, formed without desire of gain, which group in each district persons important to agriculture and enjoying the farmers' confidence. The services of the State and of the trade association have therefore been brought together. The societies of commissaries have had much difficulty in developing but it is thought that they are called upon to develop importantly.

§ 2. THE ADVANCES TO FARMERS.

The procedure by which the farmers who have returned home can obtain satisfaction is explained in a circular of the ministry, dated 21 October 1918. This is, substantially, as follows :

Advances which may amount to 1,000 francs and exceptionally to 2,000 francs a hectare, but may not exceed the amount of the loss suffered (pre-war valuation), are made to farmers in the wasted districts who return to their former farms. Out of the sum awarded 400 francs a hectare may be set aside as a working fund (necessaries of life, small purchases, wages of labourers until the first harvest has been gathered). The remainder must be spent on purchases, attested in writing, of live stock, supplies and seed, which may be furnished by the society of commissaries representing the Office of Reconstruction in the department.

In order to obtain these advances the person concerned must apply to the prefect of the department, stating, as well as the amount of the advance for which he asks : (1) his urgent reason for having recourse to this advance in order to restore his farm to working condition ; (2) the kind and size of the farm he wishes to restore ; (3) the resources which he reckons on employing to this end ; (4) the exact needs which the advance is to meet.

To this application a detailed statement is annexed of the losses suffered, attested by two witnesses who are well known in the farming world of the district, and certified by the mayor.

The special departmental committee, which meets every week, fixes within a fortnight the amount of the advance to which the applicant has right. This bears no interest and is repayable out of war damages.

On this point, as on that touching the bearing of the orders passed, and especially of those executed, previous circumstances have prevented a development proportionate to the importance of the task to be accomplished. The period which has elapsed may be called that of incubation and preparation.

The instrument is now ready, and it remains to make good use of it so that agricultural reconstruction, the basis of the whole restoration of the liberated districts, may be accomplished in the minimum interval of time.

Together with the Office of Agricultural Reconstruction there are, also attached to the Ministry of the Liberated Districts, technical reconstruction departments to whom belong the work of repairing and rebuilding dwellings, making and providing temporary houses and shelters, cleaning and levelling the soil, and removing unexploded bombs. The farmer who wishes to repair his buildings can obtain allowances by instalments, in kind or in cash, equal to three quarters of the cantonal committee's valuation, if he apply for such allowances for the purpose of works of construction which meet urgent need. Exceptionally the allowances may amount to 90 per cent. of the valuation, in the case of urgent work entrusted to the execution of a co-operative society of reconstruction.

Stocks of temporary houses are, by the care of the administration, being manufactured. The person whose house has been destroyed can apply to the prefectorate and obtain the grant of a temporary house, either as a free loan, or for a rent amounting to 3 per cent. of the net cost, or by buying it for 50 per cent. of the net cost.

For complete reconstructions the agricultural improvements department has prepared plans applicable to the various districts, taking into account climate, kind of material and the needs of small, medium and large farming, and providing for the lodging of labourers.

A farmer may also apply to the prefectorate and to the agricultural improvements engineer in order to have his land restored to a good state and cleaned.

Advances are made for household furnishing. These may amount to 1,000 francs for the head of a family and 200 francs for each person dependent on him who is not an earner, but they must not exceed the amount of his loss.

§ 3. RESULTS OBTAINED AND WORK TO BE DONE.

The provisions we have resumed have begun to produce effects. We show the results obtained up to 1 January 1919, as stated in the information supplied by the Ministry of Liberated Districts.

I. — *Nature and bearing of work done by the three sections of the provisioning department of the Office of Agricultural Reconstruction (purchase and distribution).*

(1) *Supplies section.* — On 1 January 1919 orders covering 65,528,248 francs had been given for agricultural implements; but owing to the primary material and transport crisis, which caused delays on the part of almost all suppliers, implements had been received only to the value of 4,499,158 francs. They had been distributed to the farmers who had suffered losses, to the value of 3,328,664 francs.

(2) *Seed, plant and manure section.* — On 1 January 1919 various kinds

of seed had been bought for 371,192 francs, seed potatoes for 1,464,908 francs, and manure for 1,018,200 francs. All the seed and potatoes were delivered to the farmers who had suffered loss, except 252,000 francs' worth of wheat which were, by special contracts, supplied to duly chosen farmers of the interior who were obliged to return this quantity at the next harvest, thus affording an important provision for autumn sowing.

(3) *Live stock section.* — No purchase of horses or other live stock had as yet been made by the office directly on 1 January 1919. All purchases of this kind had been made by the societies of commissaries or by the farmers themselves.

(4) *Societies of commissaries and agents.* — The societies of commissaries, from the time they were constituted until 1 January 1919, bought and delivered to farmers implements, seed and live stock worth 1,324,772 francs. In the same way, in departments in which there were no such societies the office's economic agents had at the same date bought and distributed, or paid for the farmers' direct purchases of, these goods up to the value of 696,502 francs.

To resume : the business of the office up to 1 January 1919 was as follows :

Sections	Purchases	Distributions
	francs	
Supplies section	65,528,219	3,328,664
Manure, seed and plant section	2,851,300	2,595,256
Live stock section	See text	See text
Societies of commissaries and foremen	2,022,275	2,022,275
Total	70,404,824	7,946,195

We conclude by showing the extent of the land of which the restoration to cultivation is contemplated :

The total wasted area was 3,539,000 hectares out of which there were under cultivation 2,654,000 hectares, distributed as follows :

Arable land	2,041,000 hectares
Meadows, pastures.	441,000 »
Orchards	21,000 »
Vineyards.	11,000 »
Various land	87,000 »
Gardens and parks.	53,000 »

The area which devastation had made it impossible to utilize was 145,000 hectares, including a cultivated area of 109,000 hectares

The total area of which the restoration to cultivation was contemplated was therefore 2,545,000 hectares

The Budget Commission of the Chamber of Deputies estimated that, at the present rate of values, the direct and indirect losses suffered by agriculture in the wasted districts were as follows.

Farm buildings	1,900,000,000 francs
Property not built upon	3,334,000,000
Agricultural material	3,186,000,000
Live stock	2,090,000,000
Provisions	5,839,000,000
Income from land	1,393,000,000
Income from farming	1,579,000,000
Sport	120,000,000
Agricultural drainage and waterworks	66,000,000
Woods and forests	1,660,000,000
Total	21,167,000,000

This sum represents more than one sixth of the losses (about 120 milliards of francs).

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

BELGIUM.

1. THE RESTORATION OF LAND TO CULTIVATION — *Bulletin d'Informations Agricoles*, Ministry of Agriculture, Brussels, No 5, 1 October 1919; *Le Paysan*, Louvain, Nos 4-5, August-September 1919

Since September 1912 the Belgian government, faced with the general rise in the price of food-stuffs, has recognized that the most efficacious means of remedying this is the greatest possible intensification of production. It therefore nominated a special commission with a mandate to study all the measures which might contribute to the solution of the problem and to suggest their adoption to the competent authorities. Among the proposals made (1) one which deserves notice is that for the constitution of a special body whose object it would be to promote the various measures taken in the country for breaking up waste and moorland, a work hitherto undertaken only by individual landowners. The reader will recollect that in 1913, on the basis on this resolution, a Belgian Society for Breaking-up Unculti-

(1) See in this connection the article in our issue for February 1914 (*Monthly Bulletin of Economic and Social Intelligence*), page 92

vated land (*Société belge de défrichements*) was constituted at Louvain by the efforts of several members of the commission. This society proposed to begin its activity by improving the vast abandoned zones of Campine and the Ardennes, rendering thousands of unproductive hectares fruitful. It would do this in the following ways (1): (a) by placing itself at the disposal of those concerned, whether private persons or public administrations, for the planning and execution of works of breaking up and improving uncultivated land, afforestation, the formation of pasturelands, etc.; (b) by facilitating negotiations between small farmers and communes or landowners for the letting, purchase and sale of uncultivated or improved lands, promoting and facilitating, by advances of funds, the erection of rural buildings by small farmers; (c) by giving or letting out on hire machinery, implements and other material; (d) by trading, on its own account or that of others, in the products of forestry or agriculture, undertaking the purchase, sale, production and selection of animals, seed and saplings; (e) by doing credit and banking business in order to forward all this enterprise.

Besides the lands mentioned there are today in Belgium districts entirely wasted by the war which urgently need to have their value restored to them. The "*Société belge de défrichements*" wishes to take part in this restoration and has decided to extend its activity to Flanders, placing its resources in the matter of giving information and advice at the service of all concerned. Its expert staff ascertains on the spot what damage has been done to land, and after making the investigations necessary proceeds, in agreement with those concerned, to do the work needed.

Equally noteworthy is a scheme prepared by the Ministry of Agriculture according to which every landowner can effect reconstruction on his land, either with his own means or by taking advantage of special societies, but is liable to expropriation by the State, which will at its own cost undertake the restoration of his land to fertility, if he do not provide for the execution of the necessary work within a suitable interval of time. After restoration by the State the owner re-enters on his land on fixed terms, or, if a change of ownership be advantageous, on other land of the same value. An exchange may also be made with the object of grouping several pieces of land in a single holding, to the advantage of the owner or the tenant.

Meanwhile the farmers of the wasted regions of Flanders have, as appears from the *Bulletin d'Informations Agricoles* of the Belgian Ministry of Agriculture, engaged to restore 8,000 hectares to cultivation. This undertaking is a matter of private initiative, but has financial support from the government, which grants to it subsidies varying from 200 to 500 francs the hectare in accordance with the extent of the loss suffered. The amount of the grants made already exceeds a million francs. The trades unions, which exemplify a characteristic type of Belgian organization, have moreover announced special "competitions of restored lots of land," to which prizes amounting to more than 80,000 francs will attach.

(1) For greater details as to the society's organization see the article in our issue for August 1913 (*Monthly Bulletin of Economic and Social Intelligence*), page 25.



2. THE RURAL POPULATION AND THE RURAL EXODUS. — MAX RASQUIN: "La population des campagnes", in *Journal de la Société Nationale des Agriculteurs de Belgique*, Brussels, No. 14, 16 August 1919.

A phenomenon which constituted before the war, owing to its grave consequences to agricultural economy, a very great preoccupation of many persons, and attracted the attention of the most eminent members of governments, was that of the rural exodus which appeared in an acute form in many countries — Great Britain, France, Belgium and others. In an article in the "*Journal de la Société Nationale des Agriculteurs de Belgique*" Max Rasquin examines the causes of this phenomenon in Belgium (1), and gives some data as to the Belgian rural population which are worth resuming.

The communes of Belgium belong to three categories, rural, industrial and urban communes. Urban communes are those which have at least 20,000 inhabitants and the capitals of administrative districts. There are altogether 2617 communes, of which 1954 are rural, 608 industrial and 55 urban.

The various percentages of the population of the whole country contained in each of these three categories is as follows: rural communes 38.59; industrial communes 31.81; urban communes 29.60. Thus with regard to their percentages of the population and their number, the rural communes come first and the urban communes last.

The sex of the inhabitants gives the following proportions: rural communes, men 51 per cent., women 49 per cent.; industrial communes, men 50.30 per cent., women 49.70 per cent.; urban communes, men 47.20 per cent., women 52.80 per cent. The numerical superiority of women in towns, and the almost equal proportions of the sexes in the rural communes, should be noticed. Finally the comparative examination of births and deaths gives the following rates per thousand inhabitants: rural communes, births 29.65, deaths 18.58; industrial communes, births 29.30, deaths 18.13; urban communes, births 28.18, deaths 20.49. Thus the difference between births and deaths is much the same in the rural and industrial communes, but the excess of births over deaths is less in the urban communes.

According to an enquiry resumed in the *Revue des Statistiques*, the towns of Belgium comprise 60 per cent. of the whole population and the country 40 per cent. The rates of the increase of the population per thousand inhabitants are the following: rural communes 4.6, urban communes 12.4, industrial communes 13.8.

With regard to the depopulation of country districts it is observed that although not general it is marked in some places, as in the communes in the districts of Ath, Mons, Soignies and Flanders. According to M. Rasquin it is

(1) See in this connection the article by Robert Ullens in our issue (*Monthly Bulletin of Economic and Social Intelligence*) for May 1914.

caused principally by the low rate of agricultural wages, by military service, and by the domestic nature of the employment found in towns.

Before the war the labourer who earned more than 5 francs a day was rare, and this wage was only paid in very busy times, as at harvest-time and when the beetroot crops were taken in. Women's wages scarcely exceeded 2 francs, sometimes reaching 2.50 francs or 3 francs in busy seasons.

Another cause of the exodus is said to be military service which every year brings into the garrison towns a large number of young men, who feel the attractions of town, lose their love for the country, and prefer afterwards to work in factories.

Finally, domestic service and its high wages bring many women into the country, adding to the female exodus.

To these chief causes for the constant increase of the urban population others should be added, such as the attraction generally exercised by town life, with its distractions and conveniences, and the industrial and commercial expansion which today irresistibly fascinates the more active and intelligent elements in the population, encouraging them to hope for a better future.

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3. THE AGRICULTURAL LABOURERS. — E. Vliebergh: "Nos ouvriers agricoles" in *Revue Sociale Catholique*, Louvain, No. 6, September 1913.

M. Vliebergh publishes in the *Revue Sociale Catholique* a study on the position of agricultural labourers in Belgium before the war (1), which will enable us, as soon as the necessary data are received, to institute useful comparisons with their new position after the war.

M. Vliebergh observes that of all classes of labourers that of the agricultural labourers was before the war considered to enjoy the least favourable conditions. Distinctions should however be made and the fact should not be forgotten that besides cash wages the agricultural labourer often received special benefits — a plot of land on which to grow potatoes, the opportunity to gather grass with which to feed a cow, etc. The earnings of his wife and children should be added to all this. Often his pay consisted in a part of the harvested crop, as in the case of reapers in the district south of Limburg, and as in West Flanders where tobacco-growing is contracted for, the labourer receiving two sevenths of the crop.

The mass of agricultural labourers is divided into two groups. The most numerous and important group is that of those who find work in their own commune or district. The second is that of the men who emigrate either to other parts of the country — many agricultural labourers in the southern sandy zone of the province of Antwerp go to work on the large farms in the Walloon district — or abroad, especially to France whither many labourers

(1) For agricultural labourers in Belgium see also the article in our issue (*Monthly Bulletin of Economic and Social Intelligence*) for March 1915.

from the two Flanders go to work regularly. The first group is divided into labourers permanently employed, labourers employed temporarily and belonging to gangs which carry out special works at agreed rates in a given place, and the farm servants who on small farms do all kinds of work, and on large farms only certain kinds of work under a system of scientific division of labour.

As regards wages, the last official data are those communicated to the Senate by the then Minister of Agriculture, the Hon. Helleputte, on the occasion of a discussion on the national balance-sheet on 13 August 1913 (1). This minister stated that according to an enquiry by his department the average wages, without board, of agricultural labourers were as follows in the various provinces :

	Minima francs	Maxima francs
Antwerp	1.50	2.50
Brabant	1.50	3.00
Hainault	1.50	4.00
East Flanders.	1.50	2.50
West Flanders	2.00	2.50
Liège	2.50	4.00
Limburg	1.45	2.75
Luxemburg	1.50	4.00
Namur.	3.00	5.00

The wages in question are specimen average wages, and it may be taken that an appreciable increase has already occurred. In general, the highest wages within a district are paid on the large farms, but on the small farms the labourers are, to make up, treated by the farmer almost as members of the family.

The farm-servants are lodged on the farms, but often in conditions which still leave much to be desired. As regards their board, there is no uniform system : the servants and some of the labourers are fed on the farm, almost always at the farmer's own table. The quality of the board varies from farm to farm : on some it is good, on others less so.

The best fed labourers are those boarded at the farm on which they are employed. The food of those who eat in their own cottages is generally scarce and poor.

BRITISH EAST AFRICA.

LAND SETTLEMENT. — *The Farmer's Weekly*, Vol. XVIII, No. 444. Bloemfontein, 10 September 1919.

The area of the Protectorate of British East Africa is distributed as follows :

Northern Frontier District	63,630	square miles
Jubaland Province.	45,540	" "
Tanaland Province	25,460	" "
Ten-mile coastal belt	4,420	" "
Native reserves	31,250	" "
Forest reserves	3,125	" "
Land alienated	7,440	" "
Land surveyed for alienation.	4,060	" "

European settlement is not at present suggested in the Northern Frontier District or the Jubaland or Tanaland Province. The two former, in particular, comprise large tracts of waterless country. Of the 4,000 square miles or two and a half million acres which have been surveyed for alienation nearly the whole is swallowed up by allotments under the Ex-Soldier Settlement Scheme and a certain proportion is being reserved to satisfy claims for preferential treatment.

New areas are in process of being surveyed, and the possibilities are that some 500,000 acres will thus become available for settlement. Of this area some 300,000 acres will be in the Sotik district, and the rest will be scattered between the areas already alienated and the forests, or will lie in the forests, or possibly along the boundaries of native reserves.

It is stated that when this land has been surveyed it will be impossible to constitute further watered farms, and that the remaining land admits of development only by wealthy companies who could spend large sums on water boring and irrigation. The Tana Valley would probably repay such enterprise as its lands could be used for sugar and rice growing. A further considerable area will become available for European settlement as the forests are gradually cleared away.

CANADA.

THE BOARD OF GRAIN SUPERVISORS. — *The Agricultural Gazette of Canada*, Ottawa September 1919.

On 31 July 1919 the Canadian Wheat Board was appointed by order of the Governor General in Council. This Board is to consist of not more than ten members of whom one shall be chairman and chief executive

officer and another assistant chairman. It is to make such enquiries and investigations as it deems necessary for ascertaining what supplies of wheat are available from time to time, where they are to be found and what is their ownership, the existing facilities for transporting them and elevator accommodation for storing them, and all conditions touching their marketing and market price. For the purpose of any enquiry or investigation the Board is to have all the powers of a commissioner acting under Part I of the Enquiries Act. It has power from time to time :—

“(a) To take delivery of wheat in Canada at any point.

“(b) To pay, by way of advance, to the producers or other persons delivering wheat to the Board, such price per bushel according to grade or quality or place of delivery for price purposes as shall be set out in a schedule to be prepared by the Board and approved by the Governor in Council, and to provide for the issue of participation certificates to persons entitled thereto.

“(c) To sell wheat so delivered to millers in Canada for milling purposes at such prices and subject to such conditions as the Board sees fit, the price of sale to millers being governed as nearly as may be by the price obtainable at the same time in the world's markets for wheat of equal value, regard being had to the cost of transport, handling and storage.

“(d) To store and transport such wheat with a view to the marketing of same.

“(e) To sell wheat so delivered in excess of domestic requirements to purchasers overseas or in other countries, for such prices as may be obtainable.

“(f) In co-operation with the Seed Purchasing Commission of the Department of Agriculture, and by sale to such commission or otherwise, to provide for the retention or distribution in various parts of Canada of such wheat as may be necessary for seed in 1920.

“(g) To fix maximum prices or margins of profit at which flour and other products made from wheat delivered to millers may be sold, and to fix standards of quality of such flour.

“(h) To purchase flour from millers at prices to be fixed by the Board and to sell same in Canada or in other countries.

“(i) To take possession of and to sell and deliver to millers, or to purchasers in other countries, wheat stored in any elevator, warehouse, or on railway cars or Canadian boats, and to deal with the same as to payment of advance and otherwise in the same way as if it had been otherwise delivered to the Board, and to move grain into and out of or through any elevator and to or from any car or boat.

“(j) To control by licenses or otherwise the export and sale of flour, out of Canada.

“(k) For the purposes of performing its duties under this order to allocate Canadian lake tonnage and to distribute cars for rail shipments.

“(l) To pay necessary expenses incident to the operations of the Board”.

FEDERATED MALAY STATES (BRITISH PROTECTORATE)

LAND GRANTS TO EX-SERVICE MEN — *Straits Budget*, No. 3212, Singapore, 4 September 1919

A Committee appointed to make recommendations for the granting of State land in the Federated Malay States to officers and men of the British Army and Navy has reported that there are insuperable objections to any general scheme, such as might be contemplated in temperate climates, for encouraging large numbers of men to immigrate and take up land. In its opinion Government assistance should be strictly limited to approved individual cases.

It is proposed, however, that grants of 100 acres of land, accompanied by a loan to assist in its development, should be offered to men who left Malaya to serve in the war and have spent six months in the country since their return and to men who, having served in the war, have subsequently obtained employment in Malaya and have spent 12 months in the country. If the applicant had no employment he would require to have private means on which to maintain himself while his land remained unproductive.

The grant would be subject to payment of quit-rent at the rate of 10 cents (1) an acre, but if the land were transferred to any person other than the applicant's natural heirs rent at current rates would become payable. It would be a condition of the grant that not less than 25 acres should be planted in each of the first four years. A loan not exceeding 25,000 dollars (1) would be made to the applicant payable in instalments distributed over five years. The land would be mortgaged to the Government, but as in the initial stages the Government would have no security beyond the ability, industry and good health of the applicant, it is proposed that at the end of two years the Government should have the right to have a valuation made and, if the value were found to be less than the amount already advanced, to foreclose and sell the land. It is thought that, in these circumstances, it would be better to terminate the arrangement, even at some financial loss. The right of immediate foreclosure would also be reserved to the Government if the applicant died or if he left the country without the consent of the Government.

It is recommended that the rate of interest payable on the loans should be one per cent less than that charged by the Planters' Loan Board for the time being, the lower rate being intended as a further concession to the applicants in recognition of the special claims they have on the country.

A statement is annexed to the Report showing the yield of rubber that may be expected in twelve years from 100 acres, planted in the manner stipulated, and its net value, taking the price of rubber at 1s 6d. per pound and the cost of production at 10d. per pound. The land would

(1) The dollar (= 100 cents) in use in Malaya is equal to 2s 4d

begin to produce in the 6th year and it is proposed that the repayment of the loan should commence in the 8th year. The following statement shows the estimated yield, net value, and proposed instalments of repayment :

Year	Estimated Yield of Rubber	Net Value	Proposed Instalment of Repayment
	Pounds	Dollars	Dollars
6th	3,000	857	—
7th	9,000	2,571	—
8th	16,500	4,712	1,000
9th	25,500	7,285	4,000
10th	33,000	9,428	5,000
11th	37,500	10,712	7,000
12th	40,500	11,572	8,000
	165,000	47,140	25,000

The Committee have taken rubber cultivation to illustrate their recommendations, because it is the most popular and profitable form of cultivation in the Malay States at the present time, but they urged that applications for land and loans to cultivate other agricultural products should receive equally generous consideration if they offer reasonable prospects of being profitable.

FRANCE.

A COLLECTIVE CONTRACT FOR THE HIRING OF AGRICULTURAL LABOUR — *Bulletin du Ministère du travail et de la prévoyance sociale, Paris, June-July-August 1919.*

Collective contracts for the hiring of labour have begun to make their appearance in French agriculture. Thus on 8 August 1919 an agreement was concluded between the agricultural employers' society and the syndicated agricultural labourers of the *arrondissement* of Melun, in the following terms :

"Article 1. — *Wages.* — The wages taken as basis are minimum wages. In addition to these minimum wages every worker has the right to a garden of 5 ares, dug and manured by his employer, or to an annual payment of 100 francs in lieu of a garden.

"Article 2. — The minimum wages for each category of workers shall be as follows. — For farm men, employed on all kinds of work, a minimum of 10 francs a day together with a garden as provided in Article 1.

"Article 3. — Men on monthly wages, carters and stockmen, not boarded or lodged : a minimum of 300 francs a month with a garden.

Carters and stockmen, lodged and boarded : a minimum of 160 francs a month.

" Article 4. — *Married couples employed on farms ; women servants labourers on farms.* — Married couples, a minimum of 250 francs a month with board and lodging.

Women servants. — A minimum of 90 francs a month with board and lodging. Women employed on small outdoor tasks : a minimum of 0.60 franc a month. The wages of women working on threshing machines or in distilleries must not be less than 0.75 franc an hour.

When a woman does a man's work she must have a man's wages — equal wages for equal work.

" Article 5. — *Farm stewards, shepherds :*

Farm steward (foreman) : a minimum of 350 francs a month without board and lodging, or of 200 francs a month with board and lodging.

Shepherds. — A minimum of 350 francs a month without board or lodging. Such a shepherd is responsible for feeding his dogs.

Shepherds who are fed together with their dogs. — A minimum of 160 francs a month.

" Article 6. — *Tractor drivers (specialist mechanics) :* A minimum of 400 francs a month without board or lodging.

" Article 7. — *Men working on threshing machines.* — A minimum of 12 francs a day without board or lodging when work is not done by the piece.

Article 8. — *Men working in distilleries.* — A minimum of 360 francs a month. Other workmen and employees will receive a proportionate rise.

" Article 9. — *Longer working day in time of harvest.* — Working days during which harvest work is done will be reckoned from the time the first sheaf is cut until the last is garnered and will be increased by 100 per cent.

Men employed on the farm on other work will receive 400 francs a month together with a premium of 50 francs for the harvest.

Work by the day during the harvest will be paid at the rate of 16 francs a day.

" Article 10. — *Unhealthy work.* — For unhealthy work in distilleries and on the upkeep of cesspools wages will be increased by a minimum of 10 per cent.

" Article 11. — *Piece work.* — Piece work being very variable, in accordance with soils and districts, the district union will be responsible for fixing tariffs of pay for it. Minimum wages for piece work will however be :

For trussing with three binders : 7.50 francs per hundred. — For trussing with two binders : 6.50 francs per hundred. — For trussing with one binder : 5 francs per hundred.

To fix tariffs of pay for other kinds of work the wages paid to labourers working by the hour will be taken as basis.

" Article 13. — *Weekly rest and social laws.* The weekly rest will be compulsory in agriculture and social laws will be strictly applied.

"Article 14. — *Health*. — The practice of causing labourers to sleep in byres and stables will be suppressed gradually and as far as possible."

Bedroom and dining-room accommodation will so be contrived on the farms as to give the workers the maximum of comfort.

"Article 15. — *Boy and girl labour*. — Lads and girls who cannot attain to a normal worker's production will be paid on the basis of the minimum prices fixed.

The arbitrating commissions must see that this last regulation is applied, and must see that lads and girls are not employed on heavy work beyond their strength.

"Article 16. — *Foreign labourers*. — Foreign labourers will be paid at the same rate as French labourers and will enjoy the same advantages and working conditions. All agreements to the contrary are null and void.

"Article 17. — *Mixed arbitrating commissions*. — An arbitrating commission of from three to five members will be nominated for each regional syndicate. It will see that this agreement is conscientiously carried out. It will get into touch with the employer when a conflict threatens.

"Article 18. — *Duration of the agreement*. — This agreement will be valid until 1 June 1920. If at that date it be not disclaimed it will be valid for another period of a year, being tacitly renewed. Amendments which either of the agreeing parties wish to make to it must be stated at least two months before it expires.

"Article 19. — *Events occurring during strikes*. — No dismissals will take place in consequence of events occurring during strikes and trades-union questions."

This agreement is the more worthy of remark because it will, by common consent, be respected as having legal force by the courts of *arrondissements*, being considered as part of the *local customs* obtaining between farmers and labourers.

FRENCH COLONIES.

ERECTION OF CONSULTATIVE COMMITTEES OF AGRICULTURE AND INDUSTRY IN FRENCH WEST AFRICA. — *L'Afrique Française*, Paris, November-December 1919.

A decree of 21 May 1919 institutes in the capital of each of the following colonies, Senegal, Upper Senegal and Niger, Upper Volta, French Guinea, the Ivory Coast and Dahomey, a consultative committee of agriculture and industry which will represent to the lieutenant-governor the interests of farmers, stock farmers, cultivators of forests and manufacturers in these various colonies.

These committees will be made up of two parts, of which the first will consist of members elected by the French colonists by scrutiny of lists, and the second of native farmers nominated by the local authority.

The powers of the committees are purely those of consultative bodies.

GREAT BRITAIN AND IRELAND

RESTRICTION ON NOTICES TO QUIT WHEN AGRICULTURAL LAND IS SOLD. —
Journal of the Land Agents' Society, No 10, London, October 1910.

The Agricultural Land Sales (Restriction of Notices to Quit) Act, 1910 which came into force on 19 August was designed to remedy an inconvenience which sometimes resulted when agricultural land was sold. It frequently happened that, in anticipation of a sale, the landowner gave a year's notice to the tenants to quit, in order that the purchaser might, if he so desired, have early possession of the land. The tenants were left in doubt until the sale took place whether they would be obliged to quit or not and if after the sale they were compelled to quit they had only, perhaps, two or three months in which to find new holdings and remove to them.

The principal operative section of this Act reads as follows: "On the making, after the passing of the Act, of any contract for sale of a holding, or any part of a holding held by a tenant from year to year, any then current and unexpired notice to determine the tenancy of the holding given to the tenant, either before or after the passing of this Act, shall be null and void, unless the tenant shall, after the passing of this Act and prior to such contract of sale, by writing, agree that such notice shall be valid."

The tenant either decides that he would like to leave his holding and agrees that the notice shall be valid, or he takes no action, in which case the notice becomes null and void when the land is sold, and he has an extra year in which to make his arrangements.

In the event of his taking no action, however, there is still an element of uncertainty, as it is possible that the attempt to sell may prove unsuccessful, in which case the notice remains valid and the tenant may find himself compelled to quit on the day when it expires. As, at the present time, there is a ready sale for agricultural land this inconvenience will not often arise.

NEW ZEALAND.

LAND SETTLEMENT IN 1917-18. — *The New Zealand Official Year-Book*, 1918. Wellington (New Zealand), 1919.]

Following on the article in our issue for September 1918, which described land tenure and the occupation and ownership of land down to 31 March 1917, we give the data as to land settlement in the year which ended on 31 March 1918.

Crown lands. — During this year an area of 271,325 acres was offered

for selection under the various tenures provided by the Land Act, Land for Settlements Act and Education Reserve Act.

Under the optional system an area of 3,377 acres was advertised and was practically all selected.

An area of 11,173 acres was offered on renewable lease, 6,823 acres being settlement land of which the lessees have the right to acquire the freehold, and 4,350 acres national endowment. The pastoral runs comprised 218,670 acres, the small grazing runs 13,840 acres.

An additional area of 70,882 acres of Crown, settlement and national endowment lands was set apart for selection by discharged soldiers under the ordinary tenures of the Land Act and the Land for Settlements Acts and the special tenures of the Discharged Soldiers Settlement Act.

Altogether an area of 895,655 acres was selected during the year by 1,487 selectors, as against 1,010,152 acres by 2,059 selectors in 1916-17. The figures for 1917-18 include 429 acres in towns and suburbs sold by auction to 75 purchasers. Holdings of ordinary Crown land covered 467,035 acres, those of land for settlement and Cheviot Estate land 48,838 acres, those of national endowment lands 371,609 acres, and those of educational endowment land 7,173 acres.

Of the total area of 895,655 acres selected, 188,635 acres were selected by 907 of the total number of 1,487 selectors on settlement conditions. These 188,635 acres were distributed in holdings as follows :

TABLE I. — *Land selected in 1917-18 on settlement conditions.*

Size of holdings	Number				Totals
	Sold for cash	On deferred payment licences	On ordinary settlement leases and licences	Small grazing	
Under 1 acre	51	1			124
1-50 acres	112	9	174		295
51-250 "	13	3	271		287
251-500 "	3	1	105		109
501-1,000 "	1	—	66		67
More than 1000 acres . . .	—	—	21		26
Totals	180	11	708		907
Totals in 1916-17 . . .	311	37	870		1,234

The following figures show the progress made down to 31 March 1918 in settling the Crown lands of New Zealand.

TABLE II. - *Crown land on 31 March 1917 and 1918.*

	31 March 1917	31 March 1918
Total number of selectors.	33,802	33,891
Total area held.	20,450,217 acres	20,463,122 acres
Total yearly rent or instalment payable . . .	£891,817	£922,173
Total area made freehold	16,524,314	16,643,642 acres
Land available for future settlement	Total area open for selection	976,566 acres
	Total area not yet open for selection	856,048 "
	3,677,159	3,790,365

Native Lands. In 1917-18 the Maori Land Boards disposed of 1,850 acres by lease and 826 acres by sale, as against 11,261 acres by lease and 20,179 acres by sale in 1916-17. These boards also approved, in 1917-18, 566 leases of 134,219 acres of native freehold land, and confirmed 1,139 transfers, other than sales to the Crown, of 119,236 acres of similar land. As compared with those in 1916-17, the leases had increased by 32 and the leased area by 41,916 acres, while the transfers had decreased by 56 and the area transferred by 18,146 acres.

During the year the Native Land Purchase Board proclaimed some 95 blocks, comprising 91,627 acres, to be Crown land. The actual purchases during the year were of a total area of 143,445 acres, as compared with 143,528 acres in 1916-17. In the Urewara Reserve an area of 64,603 acres was secured, bringing the total Crown purchases in the Urewara up to 248,108 acres.

Between March 1910, when the Native Land Act came into operation, and 31 March 1918, the Native Land Purchase Board spent a total sum of £1,577,007 on the purchase of native lands, and bought a total area of about 2,016,044 acres, of which some 809,005 acres were acquired on behalf of the Crown.

Land in the Pacific Islands. Various restrictions are placed on the alienation of land by natives in the Cook and Northern Islands and Nine. They may not alienate their lands as freehold nor by way of security, nor may customary land be dealt with in any such manner. No will of any native is effective as regards his interest in land. No lease may be granted for a term of more than fifty years.

Considerable areas have been leased, especially in Rarotonga, to European settlers. It is recognized that the prosperity of the islands largely depends on the settlement of the spare lands by a good class of white planters, and it is hoped that before long additional areas will be available for settlement in many islands.

Difficulties have been experienced in obtaining leases from natives, largely owing to insecurity of title. The old Land Titles Court used to sit

irregularly, and in many cases titles could therefore not be properly investigated and negotiations for leases came to a standstill. This court has now been replaced by a Native Land Court whose function it is to deal with titles to land, succession to land, the partitioning of land and kindred matters.

An important obstacle to native settlement of the land is the lack of roads. Much of the banana land has been exhausted, but owing to the great difficulties of transport the natives are unwilling to move further inland to the richer soils. The maintenance and construction of roads and bridges were formerly carried out by the natives under a system of *corvée*, but have now been taken over by the administration.

Anyone who settles in the islands should have a capital of at least £10 for each acre he takes up. The cocoanut palm does not bear for eight or ten years, during which time the planter must maintain himself by growing bananas or securing outside employment. When however the palms are bearing fully the value of the plantation is estimated as not less than £6 an acre for sixty years or more.

PORTUGAL.

AFFORESTATION OF UNCULTIVATED LAND IN PORTUGAL. — *Boletim do Conselho Central da Agricultura Portuguesa*, June 1911.

The government of the Portuguese Republic has issued a decree, No. 5784, obliging landowners who own an extent of not less than 100 hectares of uncultivated land which, owing to the quality of the soil or to position, is not adapted to any kind of agriculture, to afforest this land in accordance with a plan drawn up by the Ministry of Agriculture and showing what area is to be cultivated every year.

If by negligence or for any other unjustifiable reason, a landowner does not take steps for the afforestation of his lands which are in the condition we have described, the decree lays down that the government will, by means of the Direction of Forest and Water Departments, itself afforest such land, becoming a creditor for the capital, without interest, which it invests in the works of forestry, except such sums as are expended on the expert staff.

The debt which thus comes to burden the property in question and the State's relative right will be noted in the competent office of records.

Landowners who do not manage their lands which are thus afforested are none the less obliged to maintain certain services which are appurtenant to forestry, for instance to make provision against forest fires, etc. At the same time they may enter into full possession of their lands and the woods planted on them if they first indemnify the State for the expenses it has incurred.

When the time for tree-fellings, either total or partial, arrives, the Direction of Forest and Water Departments will authorize them, in accord-

ance with the established plan, and the State will, if it has itself been directly responsible for the planting, pay to whoever has a right thereto compensation proportionate to the area and value of the wood cut down.

It is evident that with this important decree the government not only meets the urgent necessity of utilizing the large areas of uncultivated land which there are in the country, but also seeks to obviate the considerable loss consequent on the insufficiently wooded character of a territory, when, for instance, corrosion of land and landslips occur on heights and grave injury is caused to the underlying plains.

Moreover the decree if, as may be expected, strict respect is exacted for its provisions and it is applied on a large scale, will modify the irregular distribution of rainfall which so greatly contributes, especially in Portugal, to causing the yield of the most fertile lands to be inadequate

SOUTH AFRICA.

LAND SETTLEMENT IN THE UNION OF SOUTH AFRICA IN 1917-18 — *Official Year Book of South Africa*, No. 2, 1918. Pretoria, 1919; *The Farmer's Weekly*, Vol. XVII, No. 137. Bloemfontein, 23 July 1919.

Following on the article in our issue for August 1918, which gave details as to land tenure and land settlement in South Africa down to 1916, we give the data as to land settlement in the year which ended on 31 March 1918.

During this year the work of surveying holdings with a view to establishing title continued, as appears from the following figures which are approximate:

TABLE I. *Number of plans of holdings examined and approved by surveyors general.*

Province	31 May 1910 to 31 December 1916	31 May 1910 to 31 December 1917
Cape Province . .	40,000	55,000
Transvaal . . .	128,000	141,000
Orange Free State	15,000	17,000
Natal	10,000	13,000

Crown Lands. - The following table summarizes the alienations of Crown land for purposes of agriculture which were made from 1 January 1917 to 31 March 1918.

TABLE II. — *Alienations of Crown Land, 1 January 1917 to 31 March 1918.*

Statute Governing alienation (1)	No. of holdings	No of settlers	Area acres	Valuation £
<i>Land Settlement Act, 1912, Section 11</i>	56	62	43,398	73,787
do, Section 12	453	562	1,661,050	259,136
<i>Crown Land Disposal Ordinance (Transvaal):</i>				
Leases with option to purchase	82	88	176,487	35,876
Leases without option to purchase	24	23	54,538	10,742
Act No. 15 of 1887 (Cape): Sales	9	9	49,066	4,920
Act No. 26 of 1891 (Cape): Leases	2	2	616	—
Natal Proclamation	28	23	12,692	10,021
<i>Irrigation Settlement Act, No. 31 of 1909 (Orange Free State) Kopjes Settlement</i>	4	4	86	1,100
Act No. 41 of 1902 (Cape)	7	7	2,297	6,714
Total area alienated	665	780	2,000,224	402,356

On 31 March the approximate area of unalienated Crown land was 27,159,444 acres in Cape Province, 2,486,889 acres in Natal and 14,988,889 acres in the Transvaal. There is practically no unalienated Crown land in the Orange Free State. Approximately one half of the unalienated area in Cape Province and the Transvaal and approximately eight ninths in Natal are unsurveyed. Native locations and forest and other reserves are excluded from the areas given, as are the Transgeian Territories in Cape Province, but the game reserves in Cape Province are included.

Native Lands. — Under the Native Lands Act 1913 (2) no person who is not a member of an aboriginal race or tribe of Africa may acquire land or any interest in land within a scheduled native area except with the approval of the Governor-General. In the whole period from the passage of the Act to 30 September 1918, 2,462 applications for such approval were received from the Natal, Transvaal and Orange Free State Provinces, and 2,286 of them were accepted while 176 were rejected. In consequence of a decision by the Chief Justice and a full bench in the Appellate Division of the Supreme Court, Cape Province is held to be exempt from the restriction. As provided by the Act 142 mission stations have in the same period been exempted from its restrictions, namely nine in Cape Province, ninety-eight in Natal, thirty-three in the Transvaal and three in Orange Free State.

(1) See the articles in our issues for April 1915, pages 105-112, and August 1918, pages 682-696.

(2) See *Annuaire International de Legislation Agricole* 3rd year 1913, International Institute of Agriculture, Rome, 1914.

URUGUAY.

THE HOUSING OF RURAL LABOURERS — *Diario Oficial*, Montevideo, January 1919.

The executive power has presented to the Chamber a bill in favour of the Uruguay rural classes which compels owners of farms to provide healthy and sufficiently spacious housing accommodation for all the agricultural labourers employed on their farms, whether temporarily or permanently.

This measure not only seeks to attach the labourer to the soil, in that it provides him with a convenient dwelling near the place of his work, but also aims at preventing the agglomeration of rural labourers in towns, owing to the defect of rural housing accommodation, and their employment in industries other than agriculture by which the labour supply of these industries becomes excessive and the social conflicts arising out of labour are aggravated.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (1; heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{6}$ d.	at par
1 Deciatine (2 tcherwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/61 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $\frac{83}{64}$ d.	at par
1 Lcu (100 statinki) (Bulgaria)	=	933/81 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25. $\frac{261}{64}$ d.	at par
1 Milreis, gold (Portugal)	=	45. $\frac{519}{64}$ d.	at par
1 Pesetas, gold (100 centimo) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64 d.	at par
1 Pound, Turkinh, gold (100 piastre) (Ottoman Empire)	=	185.01 $\frac{1}{61}$ d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 $\frac{3}{8}$ d.	at par
1 Rupee, silver (16 annas) (British India)	=	15. d.	at par
1 Talari (20 piastre) (Egypt)	=	45.11 $\frac{1}{35}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64 d.	at par
1 Zentner (Germany)	=	117.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

AUSTRIA.

THE DEVELOPMENT
OF SMALL GARDEN UNIONS DURING THE WAR

by HERMANN KALLBRUNNER, Agricultural Engineer.

Institutions founded to meet emergencies and arising out of the necessities of war often, after they have made good and have acquired experience, become lasting and give rise to new branches of agriculture and industry.

During the 'Thirty Years' War Wallenstein, to provide for the armies he had set on foot, made cloth weavers settle in Reichenberg, linen weavers in Trautenau and shoemakers in Münchengratz. When the war was over these people remained, and out of the improvised working settlements flourishing industries developed in course of time. The sugar beetroot industry developed when Napoleon ordained the continental blockade and Central Europe was without sugar, so that it was necessary to find a sugar substitute in the home-grown beetroot.

A like fate was to befall small gardens which during the late war attained within the boundaries of every town to an extraordinary development, greatest and most conspicuous in Vienna.

About fifty years ago a physician, Dr. Schreber, advocated the establishment of small gardens, which would be breathing-places for the towns, in which the children would have playgrounds, and in which at the same time a little vegetable-growing could be practised and small live stock could be kept. These Schreber Gardens, which in Germany form a thick belt round every town, could not be acclimatized in Austria. Only small collections of gardens arose here and there, for instance a pretty gardening area in an abandoned cemetery in Brunn.

The enormous needs of towns, to which the blockade and the extraordinary reduction of agricultural production gave rise, favoured the realization of Dr. Schreber's idea. His plan was even exceeded: the vegetable-growing, which was accessory to it, became its principal aim, while the founder's object of gaining breathing-places for townspeople in the country was not entirely overlooked. Pieces of land lying fallow, building sites, unused areas, were gradually brought under cultivation by enterprising families. The soil surrounding Vienna which is mostly bad, made up of clayey strata alternating with sand, was rendered fertile; areas were allotted on the necessary leases and protected against thieves. At first each man worked for himself. Persons of country origin, used to gardening from their youth up, naturally reaped most profit, and knew best how to obtain seed. Others soon followed their example, combined with them, and built up, out of the small gardens on a larger or smaller area, an organization. These organizations often undertook to represent the interests of their members, and bought seeds and implements and constructed hedges and water-supplies, on behalf of all and by labour afforded mutually. When crops were ripe a watch was often organized in common.

These small unions soon joined a Federation of Schreber Garden Unions, which publishes its own paper, the *Gartenfreund*, and carries on an effective work, finding gardening land for its members, managing a well organized depository to supply seed and requisites of all kinds, such as implements, roofing pulp, fencing material, manures, wire, etc., and aiding its members, practically and with oral and written advice, in their difficult struggle for existence. It should also be noticed that the federation does propaganda work for a garden settlement, that is for garden holdings which shall include a house for the gardener, and has already taken valuable initiative in this matter. Every year the federation holds a show of members' produce in which remarkable products, including those of industries connected with horticulture, are exhibited.

According to a report in Number 10 of the *Gartenfreund*, 1 October 1919, the membership of the Federation, which includes foreigners, was as follows:

in 1915	2,407	members cultivated	1,059,560	square metres of land
» 1916	2,975	»	1,391,890	» » » »
» 1917	3,980	»	1,676,790	» » » »
» 1918	4,800	»	2,223,201	» » » »
» 1919	7,920	»	2,719,208	» » » »

The members were distributed as follows by trades,

	1915	1916
Workmen	1,776	3,591
Tradesmen	492	1,314
Clerks. etc.	139	2,322
Others	—	693
Total . . .	2,407	7,920

The large rise in the number of clerks who are gardeners is noteworthy, a sign of the necessitousness of this class, but also of their energy which leads them to ply the spade and rake after their intellectual labours.

According to the calculations of the federation the whole number of the small gardens were held as follows

Year	No. of families	No. of persons	Area cultivated	No. of carts
1915 . . .	3,100	16,000	1,350,000 sq. metres	180
1918 . . .	30,000	160,000	6,000,000 sq. metres	1200

The value of the vegetables grown was 600,000 crowns in 1915 and 10,000,000 crowns in 1918.

The great interest which the commune of Vienna took in the movement and the active help it gave are noteworthy. It let its land to the gardeners cheaply, placed its water-supply freely at their disposal, and distributed implements, seed and plants either freely or at low prices. The prosperity of the small gardens is largely to be ascribed to its aid, and has, on the other hand, facilitated the provisioning of the town with vegetables, a fact which has rewarded the common labour.

Most of the gardens are devoted to vegetable growing. Part of the area is planted in potatoes; fruit-trees are much found, as well as small vines growing among runner beans. Flowers are grown less and less — a significant sign of the need for food.

Small live stock are kept in large numbers, particularly rabbits and goats, the first especially in order that fallen leaves and weeds may be utilized, and the goats for the sake of their milk for which there is great need.

According to the agricultural statistics as to German Austria, published by the Lower-Austrian Chamber of Trade and Industry at Vienna in 1919, the goats on the territory of Lower Austria were as follows:

On 31 December 1910 94,500 goats

On 31 October 1918 142,004 goats.

This rise of 50.26 per cent. is primarily due to the increased goat-keeping which must be ascribed to the small gardeners.

To sum up: it may be stated that the small gardens take a notable part in provisioning Vienna and other towns, and have brought a large number of town-dwellers to resume agricultural activity, at least in their spare time, thus at least partially lessening the differences between towns-people and country-people.

ITALY.

THE POPULAR BANKS.

SOURCES :

STATISTICA DELLE BANCHE POPOLARI. Decennio 1899-1908. Ministero di Agricoltura, Industria e Commercio. Direzione generale del credito, della previdenza, della cooperazione e delle assicurazioni sociali. Rome, Tipografia Nazionale G. Bertero and Co., 1911.

SITTA (Pietro) : Le Banche popolari cooperative italiane, la loro situazione presente, il loro probabile avvenire. In *Credito e Cooperazione*, organ of the *Associazione fra le banche popolari*, Rome, No. 1-2, 1-15 January 1919.

The popular banks are with the rural banks the fundamental organs of Italian co-operative credit. Although they are predominantly urban they all afford aid on a large scale and in various ways to farmers to whom in 1908 they lent the important sum of nearly five hundred million liras. In a valuable publication, issued in 1911 by the Ministry of Agriculture, Industry and Commerce with the help of the Popular Banks' Association, and examined by us in our issue for October of that year, the progress made by these banks in the ten years between 1899 and 1908 was amply illustrated with abundant statistics. No official publication on this subject has since appeared, but an interesting report recently presented by a councillor of this association to the commission for the organization of after-war credit enables us to enlarge our knowledge of the organization and the functions of the popular banks, and better to appreciate their effective contribution to national economy in recent years.

§ 1. NUMBER, MEMBERSHIP AND SHARES.

On 31 December 1908, the date of the last official statistics, there were 736 popular banks of the Schultze-Delitzsch type, adapted by Signor Luigi Luzzatti to the special conditions of Italy. Today co-operative banks, large and small, reach the number of about 800. Scattered over all districts they are particularly numerous in the north where, especially in Lombardy and Emilia, there are some which are powerful. Not a few have in the less important centres numerous branches and agencies which contribute to radiating and spreading the work of the central office, connecting it with much local business. The importance of these secondary offices is such that they may be considered to be real autonomous institutions, and the most suitable agencies for bringing the available surplus of urban credit into the agricultural centres.

In districts in which agriculture and credit have not reached a high degree of development the co-operative banks have also been able to arise and to prosper, rendering the most useful services to the population. The oldest are those of Milan, Cremona and Bologna which arose in 1865 and were the first manifestation of co-operative energy in the field of credit in Italy.

The variety of the elements which compose the banks is noteworthy and characteristic. Among the members are numbered large and small farmers, journeymen agricultural labourers, small and large manufacturers and dealers, workmen, employees and members of the liberal professions. The largest contingent is however furnished by the humblest classes of the population who can by acquiring a single share join their local co-operative society and procure all the direct and indirect advantages of credit. According to the statistics of 1911, in fact, 23 per cent. of the members were small manufacturers and traders, 22 per cent. small farmers, 17 per cent. employees and professional men. The other classes were represented by far lower percentages: large farmers by 6 per cent., agricultural day-labourers by 5 per cent., large manufacturers and traders by 3 per cent. The proportions between the various classes of members vary little from year to year. The fact that in the same bank farmers and manufacturers are brought together makes it possible to grant credit to farmers for comparatively long terms and large sums.

The shares are of a nominal value which varies from a minimum of 5 liras to a maximum of 100 liras. The average value which admits a member to participation in the capital and reserve fund is generally rather low, even in the districts in which are the most important popular banks. Every speculative tendency is thus excluded, while the genuinely co-operative character is confirmed even of those popular banks which by a union of many small forces have been able to compete in powerfulness with the largest speculative banking institutions.

§ 2. RESOURCES OF THE POPULAR BANKS.

The popular banks do business mainly with the capital which reaches them spontaneously (shares and deposits), and in a secondary degree with the resources they secure by discounting their paper and contracting loans.

The figure representing their share capital is not very high, partly, perhaps, because the value of a share is only nominal and because the right to vote is limited, whatever be the number of shares held, and also because a provision in the Italian commercial code forbids anyone to have a share of more than 5,000 liras in a co-operative society. Some popular banks however had on 31 December 1917 attained to enormous sums as capital, that of Milan to 10,314,450 liras, that of Novara to 9,331,300 liras, that of Cremona to 3,448,050 liras, that of Pavia to 2,000,000 liras, that of Bologna to 1,608,540 liras, that of Padua to 1,353,825 liras, and those of Genoa, Mantua, Modena, Ferrara, Rovigo, etc.

Side by side with the capital, reserves are very important. They are formed by attributions of a notable part of the profits ascertained at the end of every year. There are banks which have by long years of wise and provident management constituted funds of which the total exceeds the society's capital. In some banks capital reserves are distinguished from reserves providing against fluctuations in the value of securities and against misfortune. As to the employment of reserve funds, some

banks use them for their ordinary business while others invest them in State securities, securities guaranteed by the State, or other securities.

A prominent function which the banks have discharged with increasing success is the most eloquent proof of the great confidence they inspire in the population, especially the middle classes. This is their collecting of trust deposits. These deposits are in forms which vary with place, time and the position of the depositors. Members of the middle class who are not in trade entrust their savings to the bank in the form of savings deposits or small savings; traders and manufacturers prefer deposits on current account by means of cheques; religious and philanthropic bodies and workmen's and mutual aid associations deposit their receipts, and receive from the banks interest-bearing bonds falling due at fixed dates. This variety of deposits contributes to giving elasticity to business.

In all the banks the figure representing trust deposits largely exceeds the combined capital and reserve funds, which allows the activity of the banks to be ever more various and fruitful. From the appendices to the Minister of the Treasury's financial exposition it appears that the deposits of the co-operative popular banks, which amounted on 30 June 1914 to 703,498,475 liras, had risen on 30 June 1919 to 1,423,739 540 liras. The deposits of the popular bank of Milan reached the sum of 80 million liras, those of Cremona exceeded 70 million liras, those of Bergamo 35 million liras, those of Mantua 33 million liras. As the report already mentioned justly observes, this increase of deposits constitutes a notable advantage for the banks, but also imposes duties, ever more onerous, on their managers, rendering advisable those forms of investment which, while they ensure a profit to the bank, allow the highest degree of liquidity to be preserved and the demands of depositors to be met at any moment.

Another kind of transaction which has rapidly spread among the banks is that of issuing drafts. The popular banks issue these with increasing success, making use for their circulation of many correspondents on every money market.

§ 3. BUSINESS OF THE POPULAR BANKS.

All the kinds of capital of which we have spoken, derived principally from paid-up shares, reserves and deposits, are used by the banks for their credit business, which consists of loans on bills and discounts, loans on current account, advances on securities, goods and articles of value, and the carrying over of stock.

The employment of capital which has most importance, as regards its profitableness to the various classes of the population, is that of loans on bills and discounts. These represent the most lucrative, rapid and varied investment which the popular banks can find for their available funds. If they are wisely accorded and distributed they contribute to a rapid and easy increase of the societies' economic prosperity and welfare. The balance-sheets of the popular banks show that enormous sums are in this way

distributed among the different producing classes, and they are as much as possible divided up among numerous clients.

Commerce, industry, agriculture, crafts, the most various forms of production, individual and collective labour : all have been fed by popular credit.

The help which the popular banks give to the farmers who are their members and clients is particularly noteworthy. As has already been said, nearly a thousand million liras in loans and discounts were granted to farmers in 1908, but they have also received other forms of credit from the popular banks—current accounts secured by bills, mortgages and securities, mortgage loans, advances on pledged goods and provisions. Very often a farmer's soundest economic initiative has been inspired and supported by the direct intervention of the popular banks.

Some of the richest banks, like those of Milan, Bergamo, Cremona, Lodi, Mantua, Pavia, etc., have made and make notable loans to other societies, particularly to co-operative agricultural societies, rural banks, collective leaseholding societies, dairy and cellar societies, and co-operative production and labour societies. There is no kind of agricultural or urban co-operative society which is not subsidized and encouraged by the popular banks. Their relations with mutual institutions of all kinds are equally widespread.

The considerable number of transactions into which loans and discounts are divided shews how small and medium loans are always preferred to large loans, individual to collective bodies and co-operative to joint-stock societies.

The Italian popular banks have from the beginning used interest-bearing bonds falling due at fixed terms, and have thus been able to enlarge their business so that it includes loans to farmers which mature in longer terms than is usual. In making investments of this kind, they preceded foreign institutions of the same type.

Their unguaranteed loans (*prestiti sull'onore*) are characteristic of them, being loans of small sums, preferably to workmen, on no other security than the borrowers' work and honesty.

Their work for the improvement of social and economic conditions within their spheres of activity is especially noteworthy. Often their collaboration facilitates the execution of important works of irrigation, improvement, and public utility generally.

The increasing abundance of available funds and the present needs of industry, trade and agriculture have necessitated new forms of investing capital, while the freedom conceded to popular banks for their business has contributed to the fact that each institution has been able to prefer particular forms of investment in accordance with *particular local conditions*.

Thus we learn from the last reports on balance-sheets that the two great Milanese co-operative institutions (the *Banca popolare* and the *Banca cooperativa*) increasingly invested in advances and loans of public and industrial securities of the first order, and that the popular bank of Novara continued to make large investments in loans guaranteed by mortgages and in agricultural loans. In the field of agriculture, ac-

According to the last report, the constant effort of farmers to intensify production and overcome the numerous difficulties arising out of the war gave satisfactory results, showing that "the country did not place its highest hopes in agriculture in vain". And the popular bank of Cremona, with its enormous deposits, continued to encourage "that wonderful progress in agriculture" which is making the province one of the first in Italy. The same remark is made as to the popular banks of Lodi, and those of Pavia, Modena, Bologna and Ferrara, which last have by large advances to hemp-growers greatly helped the agricultural class to resist and overcome the crisis on the market. Other banks continue to encourage the autonomous and co-operative institutions for popular dwellings, and almost all of them give liberal aid to the autonomous consumers' associations, the rise of which has, to the general benefit of the consuming class, been provoked by the local administrations.

§ 4. FEDERATIONS.

Having noticed the constitution of the popular banks, and their chief functions for the benefit of national economy, we will pass to a brief consideration of those federations which have contributed to keeping these banks united, co-ordinating and strengthening their work. Among them we should notice, first of all, the *Associazione tra le Banche popolari italiane* which was instituted as early as 1876 by Signor Luigi Luzzatti and aims at founding institutes of popular credit, safeguarding their interests, examining and discussing economic, administrative and legislative questions regarding the organization of this credit, and collecting and publishing statistical data.

The association's first care was to study the type of co-operative credit society most suitable to the national genius and the country's needs. That type was chosen which observed the two essential principles of undenominationalism and freedom of constitutional form, a preference being given to limited liability societies. Besides circulating the model rules of a society of this type, the association in every particular case indicated what business a co-operative bank could undertake in accordance with the conditions of its district and the needs of an urban or agricultural population which it had to supply.

In order better to attain to its aims it supplies registers and forms for book-keeping and the noting of statistical data, and manuals, guides, general and special instructions, and comments on laws and rules, and it gives legal advice on questions submitted to it and keeps up a continuous and most varied correspondence with the affiliated banks.

There is mention of its action on the occasion of the reform of the Italian commercial code, with the object of bringing co-operative societies within this code, with the necessary regulations. If judgements in fiscal or other matters are given for the banks or against them, and are such that the establishment is to be feared of a jurisprudence inconsistent with

the principles upon which co-operative credit is organized, the association protects the federated banks' interests through the medium of a trustworthy legal expert.

From 1877 onwards it held seven national popular credit congresses, took part in the compilation of the various official statistics of the popular banks and, from 1889, published its periodical, *Credito e Cooperazione*, in which all questions relative to credit of this type are treated.

In 1912 the association promoted the constitution in Venice of a special popular credit institution, intended to fight usury by means of the small loans guaranteed only by character which we have mentioned. This new institution developed until 1917 and succeeded in fulfilling its purpose.

The association's work for all the co-operative banks became however particularly apparent in 1913, when it made a strong and effective opposition to the ministerial bill which aimed at making compulsory the State inspection of those credit institutions, generally, in which the deposits amounted to more than three times the capital and reserve funds. The association then undertook the defence of the freedom of co-operative banks, admitting the necessity of supervision, but maintaining that the supervision to which the banks would freely subject themselves would suffice, and excluding all government intervention of any kind, especially where the investment of money was concerned.

For brevity's sake we will not speak of the association's other useful work and varied ways of helping the societies. They are fully dealt with in the periodical *Credito e Cooperazione*. We will however notice that on 31 December 1917 it included 67 banks which represented a total paid-up capital of more than 40 million liras, reserves of more than 31 million liras, and trust deposits of more than 551 million liras. The available funds of the popular co-operative institutions united in the old association therefore amount to more their 600 million liras.

In order to unite the co-operative banks by yet closer ties the *Federazione fra gli Istituti cooperativi di credito* was formed in 1914 with a federal bank, at first situated in Milan, annexed to it for the transaction in common of credit business. From the report on the fourth year (1917-18) it appears that on 31 December 1917 its adherent institutions numbered 39, almost all of them being situated in Upper Italy. They represented a total capital of 35,519,759 liras, reserves amounting to 26,606,819 liras and deposits amounting to 503,020,830 liras, so that the total sum of their available funds was 565,147,408 liras. The 39 banks and their 170 branches, scattered even in the smallest places, today constitute by means of the federations a great force and represent a unique and vast national banking association. The adherent banks have kept their entire autonomy and local character, but on the other hand they contribute to the formation of this new and important organization which is able to carry out any credit undertaking and which offers to its clientele those aids and advantages which have hitherto been the privilege of the great financial institutions. The federal bank, constituted with a capital supplied by the in-

dividual federated banks, is also gradually completing its organization. The total work which it has accomplished for members by various kinds of business — carrying over stock, buying and selling bills of exchange receiving and paying money — covers a sum of more than 93,000,000 liras, to which should be added 26,000,000 liras for business with correspondents and clients.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BESSARABIA.

THE DEVELOPMENT OF CO-OPERATION. — *Buletinul Statistic al Românelor*, Series IV, Vol. XIV, No. 1, 1919.

Isolated associations have existed in Bessarabia since 1840, but co-operative societies properly so called have been found only since 1871, the year in which the zemstvos of the government of Chisinău made the first regulation for their organization. In 1889 there were in the jurisdiction of Chisinău 16 associations with a capital of 193,294 roubles and a total membership of 4,908. Since the co-operative movement could not be brought to progress more markedly, the government issued a new law for the encouragement of co-operation which aimed at giving larger aid to agricultural credit. The *Banca Tărăncască* was then constituted in Bessarabia. It was to enable the mediumsized farmers to buy farming land. But since the co-operative credit societies could not lend the sums needed for paying for land, the government, after a congress of agricultural societies held at Chisinău in which these bodies expressed their discontent, issued in 1904 a more liberal law as to the constitution and working of co-operative societies in Bessarabia. On the basis of this law arose the credit banks which were, by their loans, a very great help to farmers.

In 1907 there were already 121 credit societies having a capital of 2,331,041 roubles and 51,185 members. Seven years later, in 1914, their number had risen to 349, their capital to 27,267,866 roubles and their membership to 313,771. There are now more than 450 credit societies and their capital surpasses 32,000,000 roubles.

Side by side with the credit societies other forms of co-operation developed — societies for production and for the sale in common of produce, etc., which today number more than 550.

From an article in the *Buletinul economic al Basarabiei* (1) the following

(1) Year I, No. 6-7, April 1919.

detailed information is culled. At the end of 1918 there were in Bessarabia 8 unions of co-operative societies and 9 district small credit banks, which comprised 510 co-operative consumers' societies and 450 credit and loan societies. Of these last only 389 remitted their reports for 1918. They were distributed as follows in the various districts of Bessarabia.

Chisinau. . .	40	credit societies and 108	co-operative consumers' societies			
Bender . . .	53	»	»	»	84	»
Akerman . .	75	»	»	»	35	»
Orhei . . .	50	»	»	»	86	»
Soroca . . .	45	»	»	»	79	»
Balti . . .	44	»	»	»	56	»
Hotin . . .	15	»	»	»	24	»
Ismail . . .	42	»	»	»	38	»
Cahul . . .	16	»	»	»	38	»
					—	
Total . .	389	»	»	»	548	»

The total assets of the credit societies amounted at the end of the year to 31,567,278 roubles of which 10,891,906.47 roubles represented the value of the loans made, 5,961,611.88 roubles the total value of goods, 3,530,393.41 roubles the cash in hand. The societies' capital was at the same date 2,025,065.09 roubles and interest-bearing deposits amounted to 13,760,971.86 roubles. The reserve fund amounted to 953,037.16 roubles, total profits to 4,851,476.29 roubles.

Co-operative consumers' and credit societies are both, as we have seen, federated in various organizations — unions of co-operative societies and district banks. The 8 unions of co-operative societies are the following: (1) The *Centrala Unionilor Cooperativelor din Chisinau*, constituted in September 1918. After five months of activity it had, on 1 February 1919, assets amounting to 3,421,394.52 roubles. (2) The *Unionea Basarabeana* for credit and loans in Chisinau, with branches in Balti, Soroca, Orhei and Leovo, constituted in 1915. It included 149 societies on 1 August 1918. Its assets then amounted to 18,107,800.35 roubles, of which 6,797,334.86 roubles represented loans on grain while the capital and reserve only amounted to 600,350.76 roubles. (3) The *Unione Dunăreana de Consum* of Ismail, also constituted in 1917, comprises 47 societies. In 1918 it had a profit of 40,323 roubles. (4) The *Unionea de Credit si Păstrare Sud-Basarabeana* of Ismail was constituted in January 1916, includes 57 societies, has branches in Bolgrad and Chilia, and has a grain selling department. At the end of 1917 its assets amounted to 4,715,590.18 roubles. (5) The *Unionea mixta de credit si consum din Cetatea-Alba Akerman*, constituted in November 1917, comprises 74 credit and loan societies. In December 1918 its assets amounted to 4,858,760.02 roubles, as against 2,793,201 at the end of its first year of busi-

ness. (7) The *Unionea de Consum din Calărdși* which was recently constituted has not yet published a report. (8) The *Unionea mixta Tighind (Bunder)* comprises 27 societies.

The 9 district small credit funds showed at the end of 1918 assets amounting to 34,075,040 roubles, as against only 232,664 roubles in 1910.

The co-operative societies were at first under the supervision of the Russian State Bank. Since Bessarabia has passed to Roumania they have been subject to the Roumanian Direction of Agriculture, within which body the State co-operation department is engaged on determining the relations which should exist between the societies and the Central Bank of Popular Banks and Agricultural Co-operative Societies (*Casa Centrală a Bancilor populare si Coopeativelor sătești*).

BRITISH INDIA.

BENEVOLENT INSTITUTIONS FOR LIVE STOCK. — *Madras Bulletin of Co-operation*, Vol. XI, No. 3, Madras, September 1919.

In the Bombay Presidency there are many local institutions, known as "pinjirapoles," the object of which is to afford shelter for aged, ownerless and maimed animals. The local merchants levy a voluntary tax on their business and with the proceeds maintain these institutions. They also form committees to look after their management. In years of famine many animals, particularly young cows, are given over to the pinjirapoles because their owners are unable to maintain them and do not wish, on account of their religious sentiments, to sell them to the butchers. Mr. Y.N. Marathe, veterinary inspector, Poona, has written a pamphlet in which he urges the pinjirapoles to undertake the work of cattle-breeding. He points out that they have large resources and are in possession of a considerable number of young cows of different breeds. He advocates the formation of a Central Committee at Bombay to which the local pinjirapoles should be affiliated. To meet the objection which might be raised to the conversion of the pinjirapoles from charitable institutions into business concerns, Mr. Marathe proposes that each should be divided into two branches, one of which should be administered entirely on charitable lines, while the other would carry on business transactions.

FRANCE.

1. **CO-OPERATIVE CREDIT IN ALSACE AND LORRAINE.** — Communicated by M. A. Lauget to the annual general meeting of the *Société d'Économie Sociale* and reproduced in *La Réforme Sociale*, Paris, 1-16 December 1919.

Towards 1880 the plan was formed of founding in Alsace and Lorraine on sound bases an agricultural credit bank, and the first idea entertained was to introduce into the country the use of savings and loans banks of the Raiffeisen type. The aim of these is, as is known, to give small vil-

large capitalists an opportunity to lend money, with all necessary security, to their fellow-villagers who are in temporary need of it. Banks of this kind produced excellent results in Alsace and Lorraine. In particular, they rid the country districts of the usury which was preying on them. Their management always showed itself to be satisfactory: the Raiffeisen banks were unlimited liability societies, and therefore all their members had the greatest interest in narrowly watching the progress of their business and in trusting only trustworthy men.

At the same time as these banks were being formed, more or less everywhere, they grouped themselves in federations, and as in one village the richer lent to the more needy inhabitants if these were honest and industrious, so the banks which had the largest resources made advances to those in need of them, through the medium of a central agency which received surplus funds, and distributed them, determining their mode of employment.

Later this powerful organization, which extended all over Germany, was further improved and was divided, in every German State, into two distinct but closely united sections.

The first of these sections comprised departments of inspection, auditing, advertisement and technical instruction, and spread among farmers indispensable knowledge as to the scientific use of chemical manures and agricultural machinery, the consolidation of holdings, the improvement of agricultural processes, etc. The second section was concerned with questions connected with money: it was a veritable bank which centralized the funds contributed to it by the banks and also did an important trade in machinery, manures and supplies of all kinds, which were bought wholesale and could therefore be resold on the best possible terms.

While the first section was constituted as a local society, having its office at Strasbourg, the second took, on the other hand, the form of a Strasbourg branch of a large agricultural bank of which the head-office was in Berlin and in which all the Raiffeisen banks, including those in Alsace and Lorraine, had shares. The shares were of a uniform price between 1,000 and 1,250 francs, were all nominative, and gave the right to a fixed dividend which might not exceed 5 per cent. They could not occasion any speculation, and since they were not quoted on the Exchange they were not subject to the fluctuations of the market. It was through the medium of these branches, which were established in all German States and provinces, that funds were transmitted to Berlin to be used in the best interests of agriculture generally.

Alsace and Lorraine, being countries of small but very productive farming, always have available capital which they are not able to use within their boundaries. In consequence the branch at Strasbourg, since it could not invest in Alsace and Lorraine all the capital which came from the rural banks of the two provinces, was obliged to send a considerable surplus to the head-office in Berlin. At the date of the armistice, 11 November 1918, the funds sent to Berlin by the Strasbourg branch amounted in round figures to the sum of 68 million marks or 85 million francs.

After the armistice this branch was sequestered as a German house

but continued its business under the supervision of administrators nominated and controlled by the government. To give an idea of the activity of the rural banks of Alsace and Lorraine we note that from 11 November 1918 until the beginning of the following June the sequestered branch, since it could no longer send funds to Berlin, bought 14,300,000 francs' worth of National Defence Bonds, and had at the same time nearly a million francs in the bank and much the same sum in hand. These figures, in themselves eloquent, show better than a long exposition the importance which Raiffeisen banks have come to have in Alsace and Lorraine where there are now 472 of them.

But these Raiffeisen banks are not the only active agricultural credit establishments in Alsace and Lorraine.

Owing to special circumstances the government of Alsace and Lorraine tried, some thirteen years ago, to compete with the Raiffeisen banks and deflect from them the clientèle they had secured for themselves. It therefore set up a new institution, which however faithfully copied the organization of the Raiffeisen banks, similarly comprising two sections, one for inspection, advertisement and instruction, and one for banking, the investment of funds and trade. Thanks to government support the new institution soon prospered, yet did not lessen the importance of the Raiffeisen organization. It includes today 228 savings and loan banks, and some sixty miscellaneous associations, such as dairies, breeders' unions, etc. According to its balance-sheet for 1917, it has collected 21 million marks or, in round figures, 26 million francs, which are centralized in Strasbourg and invested in Alsace-Lorraine in loans to communes or in movable property.

Such are the two institutions responsible for ensuring agricultural credit to Alsace and Lorraine. They are, as has been seen, based on the same principle that of establishing in rural communes savings and loan banks in the form of unlimited liability societies, and of depositing in central banks funds which are not utilized, in order that they may be invested and bear interest. The difference between the rate of interest received and that paid allows the rural banks to build up gradually small individual endowments.

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.. CO-OPERATIVE SOCIETIES FOR THE CULTIVATION IN COMMON OF LANDS IN THE ARRONDISSEMENT OF RHEIMS. — *Annales de la mutualité et de la co-opération agricoles*, Paris, September-October 1919.

Among recent co-operative societies for the cultivation of lands in common, the eight already at work in the *arrondissement* of Rheims deserve notice.

The first, founded at Pontfaÿverger, has 16 members and cultivates 1,050 hectares. It ploughed nearly 600 hectares and sowed more than half that area during the year. This land is in striking contrast with the neigh-

bouring lands on which farmers work in isolation. The society has obtained an advance of 650,000 francs from the government. Quite recently it received from the British Royal Society an allotment of ten rams and some hundred Southdown Suffolk ewes.

We should add that in order to keep the wives of farmers who have returned to Pontfaverger on the land, the foundation of a factory of imitation Oriental carpets is contemplated. It will provide them with fairly lucrative employment for their leisure hours.

Pontfaverger's example has been followed by Vitry-les-Rheims where a co-operative society groups 80 members holding 2,200 hectares. This society was able to sow 300 hectares in oats and 100 hectares in barley. It has obtained an advance of 800,000 francs.

Other co-operative societies have been formed at Nogent-l'Abbesse (91 members, 835 hectares), Beaumont-sur-Vesle (29 members, 324 hectares), Cernay-les-Reims (90 members, 1,257 hectares), la Naivillette (14 members, 432 hectares), Pomacle and Bazancourt. In most of these communes the co-operative societies contemplate a consolidation of holdings. In other communes the farmers have, in view of the results which have been obtained, considered the possibility of uniting in co-operative societies for the cultivation of land in common.

RUSSIA.

1. THE WORK OF THE COUNCIL OF THE ALL-RUSSIA CO-OPERATIVE CONGRESSES. — *The Russian Co-operator*, Vol. 3, No. 11. London, November 1919.

The first two years of the existence of this Council (1) coincided with the most critical events in Russia. However, the Council succeeded in convening in February 1918 the first All-Russia Co-operative Congress, which discussed and settled a number of questions on the co-operative production, sale and purchase of commodities. In May 1919 it was intended to hold a further Congress.

Amongst the questions which occupied the attention of the Council the following deserve to be specially mentioned: the opening of the Co-operative Institute; the participation in government bodies controlling the economic life of the country; the protection of the interests of co-operation; the publication of an encyclopaedic dictionary with a special part devoted to co-operation under the editorship of a body nominated by the central co-operative organizations; the establishment of a Central Economic Council, and the organisation of investigations on questions of economic policy; the establishment of co-operative courses, etc.

The Council published during 1918 a series of appeals and circular letters to all co-operative unions. Thus in May 1918 an appeal was published dealing with the necessity of maintaining co-operative unity and co ordin-

(1) See our issue of February 1918, page 126.

ating co-operative activities. Another appeal, dating from the same month called for support for the Co-operative Institute. In November the Council protested against the forcible nationalisation of the Popular Bank of Moscow.

A number of conferences was convened by the Council with the special task of devising means for protecting and safeguarding the interests of co-operation. The questions dealt with at these conferences included the financing of co-operative industries; the adjustment of the conflicts arising between distributive and productive co-operative organisations and their members; the participation of co-operative organizations in the compulsory trade exchange; the decree on the organization of supply; the proposal regarding a government credit for 1,000 million roubles for agricultural development and improvements; the establishment of a number of new central co-operative organizations.

The work of the Council is divided amongst a number of departments, such as Legal, Statistical Economic, Educational, Publishing, and Instructors' Departments, the Information Bureau and the Editorial Offices of the periodical publications issued by the Council. The latter are: the monthly "*Izvestia*" (*Messenger*), the official publication of the Council; the "*Kooperativnaia Zhisn*" (*Co-operative Life*), a monthly journal, and the "*Viestnik kooperativnikh Soyusov*" (*Messenger of the Co-operative Unions*).

The Council has also a library and a bookshop.

One of the most important parts of the work of the Legal Department is its rôle in the official procedure of registering the articles of association of co-operative societies. The Council is officially represented on the Government bodies dealing with the registration: all articles of associations presented for registration must be accompanied by the "considered opinion" of the Council, in the absence of which the registration is refused; all Government bodies are bound by law to file with the Council copies of all articles of association which have been presented for registration at any time, and in case of refusal to acquaint the Council with the motives which lead to this decision. Under the present conditions, when the registration of co-operative societies is entrusted to the newly formed co-operative sections of the local economic councils instead of being in charge of judicial bodies, as before, this part of the work of the council is of special importance to Russian co-operation. The Legal Department is also entrusted with providing legal advice to the co-operative societies and their members and it publishes model rules for co-operative societies of various kinds, reference books, and articles on co-operative law.

The Statistical Economic Department was established in November 1917. During its existence, this Department has carried out two censuses of co-operative unions existing on 1st October 1917 and 1st January 1918 respectively, and published their results; and has initiated the organization of co-operative archives, containing information on the co-operative movement in Russia. At present this department is engaged in carrying through a new census of co-operative societies and in compiling a central register of co-operative societies and their unions.

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2. OPERATIONS OF THE POPULAR BANK OF MOSCOW IN SIBERIA. — *Commerce Reports*, No. 276, Washington, 24 November 1919; *Russian Co-operator*, Vol. 3, No. 12, London, December 1919.

The Provisional Board of the Siberian and Ural Branches of the Popular Bank of Moscow was created in October 1918 and legalized by decree of the Omsk Government on 17 October 1919. The branches which are controlled by the Board serve 113 co-operative unions and combinations, not counting individual societies. New branches of the bank are to be established in Urga and Verkneudinsk.

Notwithstanding all difficulties, the branches were able to emerge from the year 1918 with increased strength. In 1918 the Siberian branches sold 23,515 shares of the Popular Bank of Moscow for 5,853,900 roubles, and in 1919, up to 15 April, an additional 39,244 shares for 10,203,440 roubles. Of the total shares sold in Siberia, 49,143 shares were acquired by consumers' societies, 10,531 by credit societies, and 2,045 by producers' societies. On 1 January 1919, the deposits and current accounts reached 71,130,000 roubles, as against 13,484,000 a year before. The account with the central office increased from 17,261,304 roubles to 79,108,326 roubles. For 1918 the Siberian branches of the bank opened credits totalling 309,970,000 roubles. On 1 January 1919, the credits totalled 212,130,000 roubles. Of the latter, those opened in favour of the co-operative societies were divided as follows: Credit associations, 85,000,000 roubles; consumers' societies, 120,700,000 roubles; producers' societies, 6,730,000 roubles.

On 16 July 1919 the joint balance sheet of the Siberian branches of the Popular Bank of Moscow was as follows:

Assets	Roubles	Liabilities	Roubles
Cash in hand	51,231,000	Deposits	159,671,000
Current account . . .	23,119,000	Rediscount	7,550,000
Loans and discounts . .	169,069,000	Due to central office .	99,596,000
Securities	313,000	Other liabilities . . .	38,082,000
Due from central office .	51,761,000		
Other assets	9,103,000		
Total	301,899,000	Total	304,899,000

SWEDEN.

CO-OPERATIVE DAIRIES IN 1917. — *Sveriges officiella statistik: Mejerihantering å 1917 av kungl. Statistiska centralbyrån*, Stockholm, 1919.

There are four different kinds of dairy in Sweden:

(1) Co-operative dairies which are associations among milk producers for the utilization of their own milk and sometimes also of milk supplied by non-members, and for the sale of the produce for the common profit of those participating in the enterprise.

(2) The dairies called "estate dairies" which receive milk entirely or mainly from the owner of the estate in question.

(3) Purchasing dairies which work milk and cream bought outside.

(4) Dairies intermediate between (2) and (3) which work milk coming from the landowner's byres, but also, and in a larger proportion, milk bought outside.

The numbers of the dairies of the different kinds were as follows in 1907 :

Co-operative dairies	637
Estate dairies	330
Estate and purchasing dairies	165
Purchasing dairies.	630
<hr/>	
Total . . .	1,762

The number of persons supplying milk to the dairies was 99,884, of whom 68,960 supplied it to co-operative and 31,024 to other dairies. The comparative importance of the co-operative and the other dairies appears in the following table :

	Milk		Cream	
	Weight in thousands of kilogrammes	Value in crowns	Weight in thousands of kilogrammes	Value in crowns
Co-operative dairies	613,803	105,388,658	867	1,084,452
Other dairies . . .	318,195	59,916,921	517	722,103
Total . . .	931,998	165,305,579	1,384	1,806,555

The average price of a kilogramme of butter was 17.2 öre in the co-operative and 18.8 öre in the other dairies. The reason for the former lower price is that the co-operative dairies often return skimmed milk and buttermilk to suppliers very cheaply or for nothing.

The quantity and value of the products of co-operative and other dairies in 1917 are shown in the annexed table.

The direct sale of whole milk and cream is on a far less scale in co-operative than in other dairies. Out of 1,000 kilogrammes of milk and cream, it may happen that 189.4 kilogrammes of milk and 14.8 kilogrammes of cream are sold in the co-operative, and 217.1 kilogrammes of milk and 15.3 kilogrammes of cream in the other dairies.

The average sale price of a kilogramme of whole milk is 24.5 öre in the co-operative and 23.2 öre in the other dairies. The difference between the cost and sale price, that is to say the profit, is 7.3 öre in the co-operative and 4.4 öre in the other dairies.

The manufacture of butter has been comparatively far more extensive in the co-operative than in the other dairies. In the co-operative dairies 25.7 kilogrammes of butter have been manufactured for every 1,000 kilogrammes of milk and butter received ; in the others only 14.4

Quantity and value of produce of the dairies in 1917.

		Co-operative dairies		Other dairies		All dairies	
		Weight in thousands of kilogs.	Value in thousands of crowns	Weight in thousands of kilogs.	Value in thousands of crowns	Weight in thousands of kilogs.	Value in thousands of crowns
Whole milk sold		117,921	28,940	70,211	16,270	188,132	45,210
Cream sold		9,188	12,112	4,949	7,353	14,137	19,465
Butter		15,990	59,632	4,672	17,345	20,662	76,977
Whey butter		13	40	88	268	101	308
Cheese		1,971	4,377	8,294	18,072	10,265	22,449
Mesost cheese		370	393	204	181	574	574
Milk derivatives		27	38	784	1,230	811	1,268
Skimmed milk	returned to suppliers free.	101,365	2,531	2,930	73	104,295	2,607
	sold to suppliers	223,996	5,689	57,481	1,438	281,477	7,127
	sold to outsiders	72,916	7,586	39,881	3,995	112,797	11,581
	used to feed stock	1,241	41	11,345	446	12,586	487
Buttermilk		24,225	1 115	7,468	386	31,693	1,501
Whey		14,877	152	76,043	955	90,920	1,107
Total value in 1917			122,619		68,012		190,661
" " " 1916			112,566		59,835		172,401
" " " 1915			81,913		51,888		141,801
" " " 1914			75,044		54,137		129,181
" " " 1913			73,355		56,484		129,839

kilogrammes. The manufacture of a kilogramme of butter has, on an average, required 25.8 kilogrammes of whole milk in the co-operative and 26 kilogrammes in the other dairies.

On the other hand, the production of cheese is much less in the co-operative than in the other dairies. The co-operative dairies make 3.5 kilogrammes of cheese for every 1,000 kilogrammes of milk and cream they receive; the other dairies 28.1 kilogrammes.

An essential difference between the co-operative and the other dairies is in their use of skimmed milk. The former give 25.4 per cent. of the skimmed milk back to the suppliers for nothing and sell them 56.1 per cent. at a low price, while the latter give 2.6 per cent. back to the suppliers and sell them 51.5 per cent. Of the remainder, the co-operative dairies sell 18.2 per cent. to the general public and use 0.3 per cent. for feeding stock, while the other dairies put 35.7 per cent. and 10.2 per cent. to these respective uses.

The costs of the co-operative dairies amounted to 15,022,152 crowns, that is to 24 crowns 13 öre for every 1,000 kilogrammes of milk and cream they received.

Part II: Insurance and Thrift

PORTUGAL.

COMPULSORY SOCIAL INSURANCE IN PORTUGAL.

ORGANIZAÇÃO DOS SEGUROS OBLIGATORIOS, DAS BOLSAS SOCIAIS DE TRABALHO E DO INSTITUTO DE SEGUROS SOCIAIS OBRIGATORIOS E DE PREVIDENCIA GERAL — Ministério do Trabalho, Lisbon, 1919.

By a decree of the 10th of last May an Institute of Compulsory Social Insurance and General Thrift (*Instituto de Seguros Sociais Obrigatorios e de Previdencia Geral*) was instituted in Portugal. It is entrusted with the management of all the forms of insurance against sickness, the accidents of labour, invalidity and old age introduced by the decree of the same date, and of all the forms of social insurance and thrift in the Republic, that is of free mutual insurance institutions of all kinds, the insurance afforded by joint-stock and mutual societies and trade insurance, and the inspection of all compulsory and voluntary insuring agencies.

The Institute also has the duty of supervising the labour exchanges which were instituted by a decree also dated on the 10th of last May.

This sum of social provisions, if it is not directly concerned with agriculture and agricultural labour, yet has thereon an indubitable reaction, for many of these forms of compulsory insurance extend to the tillers of the soil, as we shall see when we examine the new decrees separately.

§ 1. ORGANIZATION OF THE INSTITUTE OF COMPULSORY SOCIAL INSURANCE AND GENERAL THRIFT.

According to its foundation decree the duty of the Institute of Compulsory Social Insurance and General Thrift is the supervision, and management connected with, and the execution of, all laws and regulations in force which concern the affording of compulsory insurance in Portugal. The Institute remains dependent on the Ministry of Labour but has within the limits of legislation in force and in accordance with the rules of its foundation decree, autonomous management.

Financing of the Institute. — The State is responsible during the first five years from the time of the Institute's foundation for 50 per cent. of its expenses for the staff and material necessary to its outside and interior working. The remaining 50 per cent. is supplied by the Institute's own extraordinary income.

Subsidies and grants conceded before the Institute was founded to the various agencies of assistance, and figuring on the balance-sheet of the Ministry of Labour for the whole of the year 1918-19, continue to be the State's responsibility, but are specified in that balance-sheet as grants to the Institute of Compulsory Social Insurance.

For the constitution and working of the Institute the imposition and collection of the following percentages, as compensatory receipts, are authorized: 2 per cent. of premiums collected by the joint-stock and mutual societies practising insurance, 3 $\frac{1}{2}$ per cent. of the premiums collected from all the foreign societies authorized to practise any branch of insurance, and 1 $\frac{1}{2}$ per cent. of the capital issued by the Portuguese and foreign societies in Portugal, by whatever banking operations it is constituted so long as they have no employees' pension fund.

Having shown the general lines of organization of this great insuring institution, we will examine individually the decrees establishing compulsory insurance against sickness, the accidents of labour, disablement and old age, and that which refers to the institution of labour exchanges.

§ 2. COMPULSORY INSURANCE AGAINST SICKNESS.

If an important organization for social protection, like that of free mutual aid against sickness, has already existed in Portugal for about a century, it has, for reasons which need not be stated, been active in too narrow a sphere to allow it to be useful to the whole labouring class of the Republic.

We know that it was exactly in the large centres of agricultural, industrial and maritime activity that mutual aid societies were lacking. There were places in which the assistance given was rudimentary, and communes existed which had a population of 20,000 or 30,000 and were without a real agency of mutual aid in case of sickness.

The new decree which we are about to resume therefore came opportunely to place insurance on that wide basis which the economic needs of the country call for, and to guarantee its results from every point of view.

According to the decree all communes, whether on the continent or the islands of Portugal, are obliged to form an institution of mutual aid for sickness and are able to found delegations and agencies in the most populous parishes.

These bodies are legal corporations, may with the authority of government own urban land, and are exempt from paying the stamp duty on the deeds connected with their mutual business, the registration tax on the conveyance of the real estate they acquire on any pretext and the land tax on

the real estate they own. They have, among other rights, that of accepting legacies and inheritances without liability to debts beyond assets descended, and that of receiving pecuniary aid from the Institute of Compulsory Social Insurance and General Thrift when, owing to an epidemic, such is needed.

To existing mutual associations the right is given of becoming compulsory within 60 days of the publication of the decree.

The members. — All persons of both sexes between the ages of 15 and 75 are obliged to enrol themselves in the associations, with the exception of those who already belong to an association of mutual aid for sickness.

Members are divided into members by right and effective members. The former comprise owners and usufructories of land, civil servants, administrative officials, capitalists and manufacturers whose annual income exceeds 900 milreis, and who, although they have no right to aid from an association, must contribute to the assets of their local mutual association, making annual payments graduated as follows :

from 900 to 1,850 milreis	50 reis
» 1,850 to 3,800 »	100 »
» 3,800 to 5,000 »	200 »
5,000 milreis and more	300 »

The effective members are divided into three classes and comprise all whose annual income is less than 900 milreis. These have the right to aid from their association and must pay into its funds the following monthly sums :

Effective members of Class I	50 reis
» » » II	40 »
» » » III	30 »

The members by right become effective members when their annual income is so reduced as to be less than 900 milreis.

There are also special rules in the decree in favour of rural labourers, labourers employed in the open air, dock-labourers and men employed on rivers, who are exempted from making the payments mentioned for six weeks in each year, in the rainiest and stormiest season, but retain their right to the whole benefits and subsidies fixed by the State.

Members' rights. — Every member has, three months after he has paid his first subscription, the right in case of illness to the benefits of the association, whether attendance be given at home or in hospital, to repayment of the expenses incurred for medical attendance, and to the supply of all means of cure for himself, his wife, his children under fourteen years old, and the persons he maintains who are not included among the members of the Institute of Compulsory Social Insurance and General Thrift.

In case of the death of a member enrolled in the association for at

least two years his family has right to a sum which will partly cover the cost of the funeral.

Members of the first, second and third classes will, six months after their first subscription has been paid, acquire the right to receive pecuniary grants, and, if necessary, to receive a particular kind of care, when they find themselves unable to work.

These grants will be as shown in the following table :

First class members				Second class members				Third class members			
1st	period of	30 days	30 reis	1st	period of	30 days	24 reis	1st	period of	30 days	16 rs
2nd	"	"	30	"	2nd	"	30	"	2nd	"	30
3rd	"	"	30	"	3rd	"	30	"	3rd	"	30
4th	"	"	275	"	4th	"	275	"	4th	"	275

It should finally be noticed that the pensions and grants conferred on members and their heirs are of the nature of maintenance allowances and may not be pledged, and that the right to them lapses within a year from the day on which they become due.

In places in which there is no provision for public assistance the association is also able to contract with the municipal chambers, the parochial committees and any philanthropic body in the commune for the supply of medical aid to the sick, the old and the deficient who are not included among the members of the compulsory association.

The rules of each society insuring against sickness determine the official subscriptions and grants in accordance with the classes to which members belong.

In every centre of the social thrift districts a court of arbitration will be constituted which will be responsible for settling disputes arising out of the execution of the laws for compulsory insurance against sickness and the disputes concerned with the institutions of voluntary insurance.

§ 3. COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF LABOUR.

The principle of the employers' responsibility for the accidents of labour, as a means of protection for the labouring class, was established in Portugal in 1913 by the law No. 83 of 24 July. The application of this law showed, in four years for which insurance was practised by private companies and societies, not only the importance of its provisions but also the urgent necessity of extending this form of social insurance by making it compulsory for all forms of labour, agricultural, industrial and commercial.

The new decree makes insurance against the accidents of labour compulsory, obliges existing societies to become dependent on the Institute of Compulsory Social Insurance and General Thrift, and promotes the formation of employers' and mixed mutual societies in every commune of the republic.

For the purposes of the decree the following are considered to be accidents of labour: every internal or external lesion and every nervous or

mental disturbance due to an exterior violent cause acting on the patient while he is employed, and all duly attested cases of trade diseases.

Liability for compensation and charges arising out of the accidents of labour belongs to employing firms and persons who derive profit from labour, and to the State and to administrative corporations as regards the workpeople they employ, unless the laws in force or special rules exact from these last employers compensation in excess of that fixed by the decree.

In order that this collective thrift may have the possibility of extending to the whole country, every commune is obliged to form at least one employers' or mixed mutual society, legally authorized to practise insurance against the accidents of labour. Existing mutual insurance societies are allowed to continue their business of this kind and other societies are allowed to practise it, if the terms of the decree in this connection be accurately observed.

In order that the obligation to insure may not be evaded, the decree provides for the organization, for the various branches of insurance, of offices for keeping a census of employers, landowners, labourers and other employees.

Employers are obliged to supply to insured persons books of enrolment, of a form prepared by that directing department of the Institute of Compulsory Social Insurance and General Thrift which is concerned. These books will contain the name, age, trade, social position, nationality and address of the insured person and also his thumb-mark.

Pensions and compensation. — As regards pensions, in the case of the death of an insured person through an accident accompanying his work the decree fixes that 20 per cent. of his annual wages be paid to his widow during the time of her widowhood, but she shall lose the right to this pension if she marry again, receiving instead, as compensation, three times its annual amount in a single sum. If at the time of the accident the insured man was legally separated from his wife and obliged to pay her alimony, she will receive a pension equal to 20 per cent. of his annual wages until such time as she marries again.

Minor legitimate, adopted or illegitimate children have the right until they are fourteen years of age to a pension equal to 15 per cent. of the insured man's wages if there is one child, 25 per cent. if there are two, 35 per cent. if there are three, 40 per cent. if there are four or more children. Children left without either father or mother each receive 20 per cent. of annual wages up to a maximum of 60 per cent. Where there are no children, relatives or descendants under fourteen years of age who have been supported by the insured man each receive 10 per cent. of his annual wages until a maximum of 40 per cent. is reached.

Daughters have a right to a pension until they are sixteen years old. The funeral expenses of workmen who die in consequence of an accident attendant on their work are charged to employers up to fifteen times the sum of daily wages. When the accident is the sole cause of disablement for work the insured man has, from the day of the accident, the right to com-

pensation proportionate to the degree of disablement and to its temporary or permanent and total or partial character.

The decree then makes special rules for the case of a worker meeting with an accident before he has worked for a complete year, when extraordinary causes have led him involuntarily to interrupt his work, or when his work is paid by the piece, as are loading, unloading, stowing, etc. The insured man is entitled to his whole wages if the accident is caused through the fault of the employer or anyone acting in his place.

Other rules of the decree concern wage earners and apprentices under 16 years of age.

Courts of arbitration. — To settle disputes which may arise while the law is being applied, special courts are erected, consisting of employers delegates, workmen and doctors with the right to a vote, and representatives of insurance companies in a consultative capacity.

The societies' obligations. — The societies practising insurance against the accidents of employment must pay a sum, as a deposit guaranteeing their final constitution, into the treasury of the Institute of Compulsory Social Insurance and General Thrift. Societies already authorized for life insurance which wish also to insure against accidents need pay no further deposit, but societies now authorized to practise insurance against the risks of accidents among other risks must make the deposits fixed by the decree for all companies.

Employers and works which have not entered into regular insurance contracts must, on the order of the Ministry of Labour, deposit in the treasury of the Institute of Social Insurance reserves providing for the pensions for which they are liable in case of accidents causing death or permanent disablement. This deposit may be replaced by a mortgage a cautionary payment or other security.

Finally, according to the decree all business connected with the constitution and working of the joint-stock and mutual societies and the courts for the accidents of labour is exclusively within the competence of the Institute of Compulsory Social Insurance and General Thrift.

§ 4. INSURANCE AGAINST INVALIDITY AND OLD AGE.

This form of insurance has, like the preceding one, a regional character, and is complementary to the compulsory insurance against sickness and accidents of labour.

It also is based on the subscriptions, by communes or parishes, of wage-earners of both sexes between the ages of 15 and 65 who are not paid more than 900 milreis a year.

Together with wage-earners are included: (a) employees of any agricultural, industrial or commercial business who are not paid more than 900 milreis a year; (b) farmers and tenants who give manual labour to their farms and lands, manufacturers, traders, pedlars, and experts of every kind who work on their own account; (c) workmen who work at home and whose earnings do not exceed the sum quoted.

The following are excluded from the insurance : (a) officials of the State and the administrative corporations who receive, by law, a retiring pension ; (b) soldiers employed as labourers ; (c) the infirm who are unable to earn more than a third of the average wages fixed for ordinary labourers ; (d) persons who do not receive wages and earn no more than the right to free board ; (e) wage-earners and other employees who are assured of a pension in case of their invalidity or old age. The present organization of special pension funds continues, these funds depending directly on the State through the medium of that directing department of the Institute of Compulsory Social Insurance and General Thrift which is concerned.

The object of the association is to guarantee to insured persons, in case of their invalidity or old age, a deferred annuity and a pension to their surviving dependents.

Pensions and contributions. — The employer is obliged to make to insurance against invalidity and old age a contribution amounting to 6 per cent. of the wages or pay of his employees, namely a premium of 4 per cent. to the collective fund for insurance against invalidity and one of 2 per cent. to the old age insurance fund.

These percentages may be paid by the day, week, month, quarter, half-year or year but may not be paid for less than 47 weeks for any permanent employee. They will be paid in the form of special stamps exclusively supplied by the Institute of Compulsory Social Insurance and General Thrift.

The employee is obliged to contribute to the insurance by paying 1 ½ per cent. of his daily wages or salary, namely 1 per cent. to insure against invalidity and ½ per cent. to insure against old age.

The deferred annuity to which the earner has a right in the case of his invalidity is determined as follows :

Weeks		Years		Number of weekly payments		Annuity
47	×	5	=	235	$\frac{1}{6}$	of total deferred annuity
47	×	10	=	470	$\frac{2}{6}$	» » »
47	×	15	=	705	$\frac{3}{6}$	» » »
47	×	20	=	940	$\frac{4}{6}$	» » »
47	×	25	=	1,175	$\frac{5}{6}$	» » »
47	×	30	=	1,410	—	» » »

If the insured person die before he has received his pension, and if he have made the legal payments for the first five years, there will remain to the credit of his children an extraordinary pension of 60 milreis payable in six months, or to that of his widow, if he leave no children, a pension of 50 milreis. Failing his wife and children, the pension will be payable to his descendants.

Women and apprentices who do not receive board, lodging and other benefits from their employer, in addition to wages, are considered, for the purposes of the pension, to receive 50 reis a day.

Servants, including those in the country, who are lodged and boarded at their employer's expense, are held to receive 60 reis a day.

Periods of temporary illness, of military service and of unemployment to the extent of four months in five years, and the time spent on looking for work, are held to count as qualifying for an annuity.

The State is liable for a payment equal to 7 $\frac{1}{2}$ per cent. of average wages for those wage-earners who are annually away from home on military service.

The business connected with invalidity and old age pensions also falls to the State, being transacted by means of the department for the management of societies' book-keeping of the Institute of Compulsory Social Insurance and General Thrift.

An old-age pension equal to the whole of wages is granted to the insured person, in accordance with fixed rules determined by the law, as soon as he has reached the age of 70 years.

Insurance in favour of surviving dependents is accomplished by means of employees' contributions, at the rate of 1 per cent. of wages or salary, in the form of special survivors' stamps supplied by the Institute.

Business outside the office. -- The business outside the office connected with compulsory insurance against invalidity and old age and in favour of surviving dependents is done by the Social Thrift Inspections and Districts and remains dependent on that directing department of the Institute of Social Insurance and General Thrift which is concerned. This business of taking a census of insured persons and employers is undertaken, in accordance with rules approved by the government, by the private communal agents of compulsory social insurance against sickness, invalidity, old age and the accidents of labour.

Finally, the decree establishes that all mutual aid associations now existing in the Republic may adhere to the Institute of Compulsory Social Insurance and General Thrift, the managing council of which has the duty of watching over these societies' progress and their employment of their funds.

§ 5. LABOUR EXCHANGES.

Since 1893 there have existed in Portugal labour exchanges, instituted in Lisbon and Oporto which are the most important labour centres. They have been able to work only within restricted spheres and therefore have been of little public use to the country. Only now, by means of the directing department of the Institute of Compulsory Social Insurance and General Thrift, have these institutions been able fully to do the work for which they were founded, that is to act as intermediary local agencies for the demand and supply of labour. The labour exchanges are legal corporations but remain dependent on the Ministry of Labour through the medium of the Institute of Social Insurance.

Their object is to organize a district census of all wage and salary earners and to bring these into touch with employers with a view to assisting

their placing and settlement, to answer requests for information from salary and wage earners as to the nature of work, and to collect and publish official news as to the conditions of the labour market, making those concerned acquainted with the condition of the demand for and supply of labour in the chief producing and consuming centres.

They also give advice as to questions of social legislation which may interest the local labouring classes. They maintain close relations by correspondence with the Institute of Compulsory Social Insurance and General Thrift. They give lectures with the object of raising the morale of the labouring classes. They study the causes of labour crises, proposing the appropriate remedies. They promote the institution of evening courses of instruction for illiterate wage-earners.

The labour bureaux may, at the request of labourers or employers, be parties to lawsuits arising out of failure to fulfil labour hiring contracts. They are exempt from obligation to pay the stamp-duty or any other tax. They may receive pecuniary aid from the State. They may take part in meetings of a mutual character or trade meetings held in their districts, etc.

Every labour exchange has a committee of five members, of whom two are elected by the workmen's trade associations in each district or commune and three by the government. The president is nominated by the government.

The working expenses of the labour exchanges will be charged to the Institute of Compulsory Social Insurance and General Thrift.

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* *

The importance of the decrees we have examined is evident. They will undoubtedly have a beneficent reaction on all fields of labour, including that of agriculture, for, as we have already said, the various forms of social insurance which the law has now made compulsory extend to agricultural labourers, and to small landowners and tenants who themselves farm the land which they own or hold on lease.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

THE LOSS RATIO ON HAIL INSURANCE IN SASKATCHEWAN. — *The Public Service Monthly*, Vol VIII, No 5. Regina, December 1919.

The Superintendent of Insurance of Saskatchewan has issued a statement of the premiums and losses of the various companies which were licensed to underwrite hail insurance in that province during the season of 1919, which we reproduce in Table I.

TABLE I. — *Special Hail Report as at November 24, 1919.*

Name of company	Premiums	Losses	Loss ratio
Acadia Fire Insurance Co.	\$72,866.94	\$55,035.30	76.9
Alliance Assurance Co.	56,715.26	54,979.72	96.94
British America Assurance Co.	22,646.86	47,874.99	87.97
British Crown Hail Underwriters	99,712.57	69,470.96	69.67
British Traders Insurance Co.	33,237.79	23,559.44	71.18
Canadian Indemnity Co.	80,141.40	49,964.76	62.34
Canada Security Assurance Co.	81,902.59	64,090.81	78.25
Connecticut Fire Insurance Co.	184,719.87	82,200.90	69.67
Central Valley Mutual Hail Insurance Co.	5,833.09	9,833.09	57.02
Car & General Insurance Corporation	70,239.29	62,902.43	89.55
Continental Insurance Co.	84,653.55	97,751.82	115.57
Dominion Fire Insurance Co.	60,642.12	56,555.95	93.26
Eagle, Star & British Dominions	29,449.85	14,238.77	48.35
Employers' Liability Assurance Corporation	160,870.80	134,976.42	83.9
Excess Insurance Co.	100,754.92	67,411.51	66.9
Fidelity Underwriters' Agency.	34,305.92	16,749.73	48.83
Farmers' Fire & Hail Insurance Co.	38,733.28	20,029.71	51.71
Fidelity Phoenix Insurance Co.	28,309.07	18,568.11	65.59
Farmers' Mutual Hail Insurance Co.	59,797.95	52,833.39	88.35
Federal Insurance Co.	26,405.09	15,647.17	59.25
Glens Falls Insurance Co.	65,182.00	59,168.00	90.77
Great North Insurance Co.	106,700.01	128,347.27	120.28
General Accident Fire & Life Assurance Co.. . . .			
Great American Insurance Co.			
General Accident Assurance Co.	41,358.13	39,974.26	86.98
Hartford Fire Insurance Co.	181,087.11	128,447.51	70.93
Home Insurance Co.	176,724.28	13,814.14	64.4
London Guarantee & Accident Insurance Co.	52,461.32	48,705.30	92.84
Middle West Insurance Co.	12,950.43	14,218.73	109.79
Merchants' Fire Insurance Corporation.			
Mennonite Mutual Hail Insurance Co.	3,271.75	Nil	
New York Underwriters' Agency	50,943.81	40,654.00	79.8
Nova Scotia Fire Underwriters' Agency	42,225.74	50,249.51	119.00
Rochester Underwriters' Agency.	19,305.34	13,025.00	67.46
Scottish Canadian Underwriters.	4,364.94	2,897.46	66.38
Union Insurance Society of Canton	9,989.69	20,944.77	209.66
United Assurance Co.	40,350.47	34,707.70	86.00
Westchester Fire Insurance Co.	91,092.00	86,088.00	66.76
Winnipeg Fire Underwriters' Agency	17,791.48	8,976.28	50.39
	\$2,277,736.79	\$1,784,512.82	78.34

The loss ratio in 1919 was higher than in any year since 1909, with the exception of 1916, as will be seen from the following comparative statement, also issued by the Superintendent of Insurance :

TABLE II. — *Loss Ratio from 1909 to 1919.*

1909	64.12	1915	32.18
1910	43.34	1916	132.06
1911	67.68	1917	48.74
1912	72.07	1918	41.95
1913	61.96	1919	78.43
1914	23.19		

To ascertain the financial results of the various companies it is necessary to add to the loss ratio the expense ratio, which is on the average 30 per cent. of the premiums.

FRANCE.

1. THE AGRICULTURAL MUTUAL INSURANCE SOCIETIES AT THE END OF THE WAR. — *Chambre des députés: Rapport fait au nom de la Commission chargée d'examiner le projet de loi portant fixation du budget ordinaire des services civils de l'exercice 1919 (agriculture), par Adrien DARIAC, député (Session de 1919, séance du 22 mai 1919, annexe n° 6161).*

In 1898 the item first appeared on the budget of the Ministry of Agriculture of a credit of 500,000 francs for subsidizing the agricultural mutual insurance societies in course of formation and those of which the continued activity was imperilled by exceptional losses.

Since that date these societies have made considerable progress. The number of subsidized societies increased from 1,484 on 31 December 1897 to 15,041 on 31 December 1917, namely:

10,027	live stock societies
4,017	fire »
72	hail »
75	accident »

A law of 4 July 1900 enacted that in order to be legally constituted a mutual agricultural society had merely to deposit at the mayoralty of the commune in which it had its office two copies of its rules and a list of its managers.

Since the outbreak of hostilities only a very small number of new societies have been formed. Those which already existed have found obstacles in the way of their work, not being able to keep their book-keeping regularly up to date because of the mobilization of their directors and managers. The result has been that the credit assigned to State subsidies to these institutions has not been fully used and has therefore been reduced by Parliament every year since 1914. From 1,540,000 francs in 1914 it fell successively to 1,000,000 francs in 1915, 800,000 francs in 1916, 600,000 francs in 1917 and 500,000 francs in 1918.

Out of the 1918 credit a sum of 142,750 francs had been allotted at the date of the report which is our authority, namely 18,400 francs as foundation subsidies to 27 new societies and 124,350 francs to societies already active to cover their exceptional losses.

The distribution was as follows :

To new societies	{	9 live stock societies	5,700 francs	
		17 fire	»	12,200 »
		1 accident	»	500 »
To old societies	{	179 live stock	»	113,950 »
		7 fire	»	4,400 »
		3 hail	»	6,000 »

By a resolution of 8 August 1918 the grants to old societies were subjected to the following conditions:

(1) The society's rules must not allow of any division of reserves among members and must specify that the balance of profits will, if the society be dissolved, be devoted to an object of interest to agriculture.

Compensation will be paid at a rate not exceeding 80 per cent. of loss.

(2) The rate of subscriptions will be sufficient to allow the society to form reserves.

(3) Subsidized societies are invited to reinsure, and the amount of the first reinsurance premium may be deducted from the premium granted.

In order to facilitate organization for mutual reinsurance exceptional grants are annually made to the groups formed for such purpose. In 1916, 63 such groups received 139,200 francs; in 1917, 65 of them received 197,000 francs.

The development of agricultural mutual reinsurance societies is indeed alone capable of ensuring the safety of the small local groups which might disappear in the case of an epidemic or in consequence of many casualties in their district. Reinsurance allows the risks to be spread over a larger area and at the same time a fairly considerable capital to be brought together.

Among the subsidized reinsurance societies we should specially mention the Tours mutual society for reinsurance against accidents, called the *Mutuelle agricole tourannelle*, which grouped 61 local mutual societies comprising about 1,465 insured members. This society disposed on 31 December 1917 of a guarantee fund of 72,760 francs and a reserve fund of 124,992.56 francs.

The societies for the reinsurance of cattle and against fire long ago recognized the necessity of covering their over-large risks, and began to reinsure with financial societies or large mutual societies. They soon realized however that it was preferable that reinsurance should be effected in absolute conformity with the principles of mutuality. The National Reinsurance Institute, thus constituted, has accepted State supervision in respect of the two departments, cattle and fire which it has already organized. Although it was founded only in 1912 it already reinsures 43 district or depart-

mental reinsurance societies, grouping more than 3,500 local mutual societies and guaranteeing nearly 150,000,000 liras of insured capital.

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* *

2. THE LARGE MUTUAL SOCIETIES INSURING AGAINST MORTALITY AMONG LIVE STOCK IN 1918. — *L'Argus*, Paris, 7 December 1918.

The results obtained by the large mutual societies in 1918 are rather insignificant then otherwise. Of the 15 societies which figure in the table drawn up by *L'Argus*, six have not supplied figures. The results obtained by the other nine can be resumed as follows :

The Large Live Stock Insurance Societies in 1918.

Name of Society	Place of office	Number of the insured	Insured value	Receipts	Losses		Reserve at end of 1918	Percentage of losses compensated for
					Number	Amount		
			Francs	Francs		Francs	Francs	
Avenir	Paris	12,000	41,207,142	1,207,796	1,306	1,254,985	103,189	100 %
Bétail	Paris	406	359,302	12,663	12	4,496	2,947	100 %
Bon laboureur	Dreux	3,478	8,587,985	275,372	274	232,632	55,947	100 %
Cultivateurs réunis . .	Nantes	2,249	2,898,348	63,066	158	45,112	6,112	90 %
Fédération des agriculteurs français.	Paris	3,525	6,357,830	273,409	170	130,194	25,061	80 %
Garantie fédérale	Paris	6,940	19,511,400	846,878	390	500,504	221,299	80 ¾
Maternelle	Dreux	460	1,579,105	45,236	51	43,230	10,137	—
Mutuelle Percheronne .	Nogent-le-Rotrou	11,969	16,697,550	359,843	438	304,895	237,471	80 %
Prévoyante	Nemours	800	1,418,715	213,800	271	194,370	19,458 and 4751. of income	—

The reports of the societies show that the losses have considerably increased since the war in consequence of the bad feeding and overworking of the animals, the lack of veterinary surgeons and the inexperience of drivers. *L'Avenir* notices that the increase is also consequent on a new economic situation which will continue for some time. The horses requisitioned for the army have been replaced by new young horses which ought to be spared as they are not spared always, and which are put to intensive work without preliminary training. There is thus less resistance to disease.

Part III: Credit

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE "BANCO DE LA NACIÓN" IN 1918. — *Revista de Economía y Finanzas*,
Buenos Aires, 20 March 1919.

In 1918 the situation of the bank was better than in the previous year, although the uncertainty of international exchanges and the restrictions placed by belligerent States on imports and on means of communication and transport are still a grave obstacle to a regular development of trade and industry in the republic. We should notice that the operations concluded between the Executive Power and the allied governments for the allocation of the larger part of the agricultural products of the Republic were almost entirely financed by the bank, thanks to its sound credit and its recognized financial capacity. In fact 95 per cent. of the total amount of these operations was covered by the "Banco de la Nación" and the rest by other banking houses.

As regards the agricultural and the sheepfarming industry, the bank, in order to obviate the difficulties which producers encounter, has taken opportune measures tending to favouring largely the granting of credit both to agriculturists and to stockfarmers. In order to meet the scarcity of tonnage, the lack of accommodation for the harvest and other difficulties in the way of production, it decided to grant on the value of products, whether in bags or in bulk, advances up to 10,000 pesos in amount, maturing in 90 days. Such loans are made at the following rate: 6 pesos for every 100 kilogrammes of wheat and flax and 3 pesos for every 100 kilogrammes of barley and oats.

Since the circumstances we have mentioned as impeding the marketing of agricultural produce persisted, the bank authorized, in duly attested cases, a renewal for other 90 days of the obligations contracted for loans for the purchase of seed, the harvest, threshing and the bagging of grain. In order to facilitate the maize harvest authority was given to the Buenos Aires, Santa Fé, Entre Rios, Cordoba and Central Pampas branches to grant loans

up to the sum of 3,000 pesos, falling due in from 90 to 180 days, and at the rate of 60 centavos for every 100 kilogrammes of the grain.

In April new special discounts were ordered for the work of husking and bagging the maize, and were guaranteed by pledging the grain. In May, in view of the difficulties, due to unfavourable market conditions, in the way of disposing of the grain, new loans were made, and the same course was taken in October when the time of the wheat, flax and oats harvest drew near. To resume, the following loans were made :

For the wheat and flax harvest, etc.	11,623,527.65 pesos
For the maize harvest	5,956,189.90 »
On wheat, linseed, etc. in bulk	17,378,336.10 »
On maize in bulk	545,217.00 »
On wines (Mendoza, San Juan, San Rafael)	677,450.00
For growing sugar-cane (Tucumán and Monteros) :	
direct credit to cultivators	139,058.50 »
indirect credit to cultivators (discounts) . . .	191,647.87 »
On rice (Salta)	18,000.00 »
» » (Santa Fé)	20,000.00 »
Total	36,549,427.02 »

As to the amount of the loans to stockfarmers, the report notes that in the year considered this diminished, which implies an improvement in this industry since previous years. In spite of this diminution, the loans were to a larger number of borrowers, applications for them coming not only from large but also from small stockfarmers.

Altogether, including other credit operations, 60,472,218.33 pesos were lent to farmers and 108,442,008.11 pesos to landowners.

In order to extend the advantages of this important credit institution to the whole republic, the directors formed in 1918 two branches, in the provinces of Buenos Aires and Central Pampas in which there had previously been 5 of these. The branches and agencies now active in the Republic number 184.

NEW ZEALAND.

ADVANCES TO SETTLERS AND WORKERS IN 1917-18. — *The New Zealand Official Year-Book*, 1918, Wellington (New Zealand), 1919.

Following on the article in our issue for October 1918, which described the system by which since 1894 State aid has been granted to settlers and workers in New Zealand, and the working of this system down to 31 March 1917, we give the data as to the State aid of this kind afforded in 1917-18.

Advances to Settlers. — We give first the figures regarding advances authorized to settlers :

	1916-17	1917-18	1908-9 to 1917-18
Applications received { Number	1,619	1,228	62,325
{ Amount	£660,975	£511,532	£25,425,025
Advances { Number	1,412	984	47,938
{ Amount	£515 270	£353,465	£17,712,295
Amount advanced	£589,975	£367,160	£17,607,460
Amount repaid	£673,751	£501,009	£9,443,300

The advances authorized in 1917-18 were derived from the following sources :

	Number	Amount
Advances to Settlers Branch of the State Advances Offices	871	£286,395
Public Debt Sinking Fund	2	1,015
Advances Office Sinking Fund	111	66,055
	<u>984</u>	<u>£353,465</u>

The advances actually made in 1917-18 by the Advances to Settlers Branch can be classified as follows by their individual amounts :

	Number	Amount
Advances not exceeding £500 in amount . .	630	£212,275
» between £500 and £1000 in amount	93	65,005
» between £1,000 and £2000 in amount	16	21,450
	<u>739</u>	<u>£298,730</u>

These advances were made on the following securities :

	Number of advances	Amount of advances
on freeholds	471	£187,650
on leaseholds.	260	107,190
on freeholds and leaseholds combined	8	3,890
	<u>739</u>	<u>£298,730</u>

On 31 March 1918 outstanding advances numbered 19,954 and amounted to £7,587,337. They can be classified as follows by their individual amounts :

	Number	Amount
Advances not exceeding £500 in amount : .	15,020	£3,136,904
Advances between £500 and £1,000 in amount	3,095	2,198,882
Advances between £1 000 and £2,000 in amount	1,301	1,790,988
Advances between £2,000 and £3,000 in amount	178	460,563
	<u>19,594</u>	<u>£7,587,377</u>

They were secured as follows:

	Number of advances	Amount of advances
on freeholds	11,984	£5,432,980
on leaseholds	7,351	£1,999,124
on freeholds and leaseholds combined	259	155,233
	19,594	£7,587,377

The average advance on a freehold in 1917-18 was £453, on a leasehold £272 and on a freehold and leasehold combined £599. In 1916-17 the corresponding averages were £458, £277 and £650.

According to whether they are secured by rural or by urban and suburban land the outstanding advances were distributed as follows :

	Number	Amount
Advances secured by rural land	12,354	£4,956,308
Advances secured by urban and suburban land	7,240	2,631,029
	19,594	£7,587,337

The average advance on rural land is £401, on urban and suburban land £363.

The gross profits of the Advances to Settlers Branch in the year which ended on 31 March 1918 were £61,671 and its net profits £51,112. Its costs of management were £9,920 or 0.107 per cent. of the capital employed.

Advances to Workers.—For the purposes of these State advances workers are defined as persons engaged on manual or clerical work whose income does not exceed £200 a year and who own no land other than the site of the house which an advance enables them to build or buy.

In 1917-18, 555 applications for loans of this kind amounting to £197,738 were received. The advances authorized numbered 411 and amounted to £129,710. Those actually granted numbered 378, amounted to £125,855 and were secured as follows :

by freehold land	362	loans amounting to	£122,760
by leasehold land	16	»	£ 3,095
Total	378	»	£125,855

On 31 March 1918 the total amount advanced under this scheme was £3,473,250, of which the sum of £2,636,790 was outstanding and secured as follows :

by freehold land	8,933	loans amounting to	£2,530,736
by leasehold land	578	»	£ 106,054
Total	9,511	»	£2,636,790

Under the Workers' Dwellings Acts 640 workers' dwellings were erected down to 31 March 1918 and 8 more were then in course of construction. The number built and purchased in 1917-18 was 21.

SPAIN.

PROPOSED ESTABLISHMENT OF AN AGRICULTURAL BANK. — *Gaceta de Madrid* 258th Year, No. 324. Madrid, 20 November 1920.

The Minister of Fomento has introduced into the Senate a Bill for the establishment of an Agricultural Bank, the principal objects of which would be to make advances for improving cultivation or changing from one form to another, for the redemption of charges on land, for the purchase of agricultural requisites, for all kinds of land improvement, for the construction of roads and buildings, for reafforestation, for the planting of olives, vines and fruit-trees, for the acquisition of holdings (especially by associations of labourers for the collective cultivation of land), for the purchase of livestock and hire of pasture-land, and for the payment of rent or of taxes levied on rural holdings and on livestock.

The head office of the Spanish Agricultural Bank would be at Madrid and it would have at least one branch in each of the agricultural regions of Spain.

The shares, of 250 pesetas each, would be offered first to the *Delegación regia de Pósitos*, to *pósitos* and to agricultural associations, then to banks and finally to the general public. If the capital subscribed reached 50,000,000 pesetas, the State would subscribe a further 25,000,000 pesetas, but if it fell short of 50,000,000 pesetas, the State would take up shares to an amount equal to one third of the capital subscribed.

UNITED STATES.

FARM MORTGAGE INVESTMENTS OF LIFE INSURANCE COMPANIES. — BREILING (Louis): The Contribution of Life Insurance Policy-holders to Agricultural Readjustments in the United States (Address delivered at the Annual Convention of the Association of Life Insurance Presidents), *Economic World*, Vol. XVIII, No. 7. New York, 7 December 1919.

The percentage of the total assets of life insurance companies invested in farm loans is not shown in the official statistics as they group together city loans and farm loans, but original statistics contributed by the companies show that from 31 December 1914 to 31 December 1916 they increased their farm mortgage investments from \$ 655,000,000 to \$ 845,000,000 and that on 31 December 1918 they held more than \$ 1,000,000,000 of such mortgages. The increase during 1917 and 1918 would have been greater if the companies had not subscribed so largely to government loans.

One hundred and fifty companies furnished particulars of their farm mortgages, by States. These companies hold about 94 per cent. of all

such loans made by American life insurance companies, distributed as follows :

New England States	\$ 32,000
Middle Atlantic States	955,000
Central Northern States	143,280,000
South Atlantic States	29,735,000
Gulf and Mississippi Valley States	37,444,000
Southwestern States	264,977,000
Northwestern States	446,324,000
Pacific States	26,638,297

One company, which has been in operation for 52 years, has made 104,331 loans to farmers, amounting to \$ 222,811,111, secured by mortgages on 15,475,790 acres — an average loan of \$ 2,135.62 per borrower and \$ 14.40 per acre. The company acquired 1,073 pieces of land through foreclosure of mortgages ; 1,047 pieces had been sold and there were 26 pieces still on hand at the end of 1918. The total losses on farm loans were \$ 179,639, or slightly more than one tenth of one per cent.

The tendency to increase the duration of farm loans is illustrated by the experience of the same company. Originally it made farm loans for one, three or five years ; then five years ; and as the majority of five-year loans were renewed, it then made them for ten years ; since July 1915 it has made them for twenty years, the principal to be repaid by amortization.

URUGUAY.

THE MORTGAGE BANK OF URUGUAY AND ITS WORK IN 1918-19. Memoria correspondiente al 27º Ejercicio. Montevideo, 1919.

We have dealt on several occasions with the Mortgage Bank of Uruguay, describing its organization and examining its manifold activity. It is the most important of the credit institutions of the Republic, was formed, in consequence of the law of 26 March 1892, on the foundation of the mortgage department of the " Banco Nacional ", and became State property under the law of June 1912. On the basis of the report for 1918-19, presented by the president of the bank to the Minister of Finances, we are now able to follow and examine its further development and the total progress of its business for the especial benefit of farmers. We should notice above all that the bank, because of the credit balance on its payments-sheet, the high values quoted for moveable property, the increase of bank deposits, and the continual demand for income-producing real estate, and especially for land which can be used for sheep farming, that is for the Republic's fundamental industry, has been able easily to overcome the general economic crisis which began in 1913 and was aggravated in the first years of the European war.

From the figures of the report which is our source we learn that the loans made in 1918 numbered 401 and included 314 urban and 87 rural loans, and that the mortgaged properties numbered 512, namely 393 rural and 119 rural properties. These figures had, as the following table shows, appreciably diminished since the preceding year.

Number of mortgage loans (urban and rural) from 1917 to 1918.

Years	Urban lo	Properties mortgaged	Rural loans	Fields mortgaged
1917-1918.	362	502	124	160
1918-1919.	311	393	87	119

The following figures show the amounts of loans :

Amount of mortgage loans (urban and rural) from 1917 to 1919.

Years	Loans on urban property pesos	Loans on rural property pesos
1917-1918.	1,846,200	2,941,250
1918-1919.	1,887,050	2,294,200

As is seen, the sums lent in 1918-19 on urban properties had increased by 40,850 pesos, while those lent on rural properties had decreased by 647,150 pesos.

Having glanced at the bank's total loans, we will examine in detail its transactions referring to rural property, which are those most interesting to us.

The bank's 87 rural loans in 1918-19, amounting as stated to 2 294,200 pesos, can be analysed as follows :

Rural loans granted in 1918-19.

Hectares mortgaged (119 fields)	82,021 pesos
Total sum applied for.	2 689,100.— »
Average sum per hectare	32.78 »
Value of fields according to bank's valuers	4,776,421.69 »
Average value per hectare	58.23 »
Value of fields according to bank's directors	4,550,500.— »
Average value per hectare	55.48 »
Total sum lent	2,294,200 »
Average amount per hectare.	27.97 »
Proportion between the sum lent and the value according to bank's directors	50.42 per cent.
Proportion between the sum lent and the value according to valuers	42.80 per cent.

As to the rents which landowners might receive if they let these fields we have the following figures :

Annual yield according to valuator . . .	237,001.46 pesos
» » » » directors . . .	227,885.29 »
Total annual charges arising out of mortgages	183,941.48 »
Balance on basis of minimum rents namely those fixed by directors	43,943.81 »

* * *

The loans secured by rural lands are divided according to whether their amount exceeds or is less than 100,000 pesos, and are distributed in the various provinces of the Republic, as follows:

Rural loans exceeding 100,000 pesos.

Department of Canelones . . .	106,600 pesos or	4.64 %	of total sum of 2,294,200 pesos
» » Cerro Largo . . .	139,500 »	6.08 %	» » » » » »
» » Colonia	114,000 »	4.97 %	» » » » » »
» » Flores	244,500 »	10.66 %	» » » » » »
» » Florida	272,700 »	11.88 %	» » » » » »
» » Paysandú	451,700 »	19.69 %	» » » » » »
» » Rio Negro . . .	141,200 »	6.15 %	» » » » » »
» » Salto	109,200 »	4.76 %	» » » » » »
» » Soriano	010,400 »	4.85 %	» » » » » »
» » Tacuarembó . .	250,300 »	10.91 %	» » » » » »
» » Treinta y Tres .	113,000 »	4.92 %	» » » » » »
.			
Total . . .	2,053,100 »	or 89.51 %	of total sum of 2,294,200 pesos

Rural loans of less than 100,000 pesos.

Department of Montevideo . .	42,800 pesos or	1.86 %	of total sum of 2,294,200 pesos
» » Artigas	16,000 »	0.76 %	» » » » » »
» » Durazno	57,000 »	2.48 %	» » » » » »
» » Maldonado . . .	44,100 »	1.92 %	» » » » » »
» » Minas	41,800 »	1.82 %	» » » » » »
» » Rocha	10,000 »	0.43 %	» » » » » »
» » S. José	29,400 »	1.28 %	» » » » » »

Total . . . 241,100 pesos or 10.49 of total sum of 2,294,200 pesos

We should note that this rural business has been considerable throughout the country and that the bank's highest loans were made in the departments of Paysandú, Florida, Tacuarembó and Flores.

We should notice too that most of the loans made by the bank during the year varied from 10,000 pesos to 400,000 pesos in amount. In fact those of which the amount was less than 10,000 pesos formed only 7.63 per cent. of the total sum lent.

The extent to which rural loans were paid off and mortgages extinguished during the year is seen in the following tables :

Distribution of redemptions in 1918-1919

Classification by amounts			Number of mortgages	Number of fields	Amount of loans cancelled and amortized	Average sum secured by mortgage	Percentage of total sum
pesos			pesos	pesos	pesos	pesos	pesos
From	100 to	1,000	17	7	12,968.72	762.87	0.91
"	1,001 "	2,000	13	10	21,345.87	1,641.99	1.51
"	2,001 "	5,000	28	39	97,744.04	3,490.86	6.89
"	5,001 "	10,000	31	28	228,886.26	7,383.53	16.15
"	10,001 "	20,000	16	19	246,174.48	15,385.80	17.36
"	20,001 "	30,000	5	6	117,716.33	23,543.26	8.30
"	30,001 "	50,000	8	10	303,839.55	37,979.94	21.44
"	50,001 "	70,000	2	2	113,303.49	56,651.51	7.99
"	70,001 "	100,000	2	1	154,117.03	77,058.51	10.87
"	100,001 "	140,000	1	1	121,489.07	121,589.07	8.58
"	140,001 and more		—	—	—	—	—
<i>Totals . . .</i>			123	123	1,517,684.84	11,525.89	100.00

The largest total sum paid off was therefore in the class of mortgages between 5,000 pesos and 50,000 pesos in amount, the sum there paid off being 63.25 per cent. of the total sum.

57.51 per cent. of the total cancellations and amortizations were made in the departments of Paysandú, Minas, Colonia, Salto, Florida and Tacuarembó alone.

Part IV: Agricultural Economy in General

NORWAY.

THE LABOUR-SUPPLY AND WAGES IN AGRICULTURE.

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From 1875 onwards quinquennial abstracts have been made in Norway as to rates of wages in the various branches of labour, and these

allow us to follow the successive developments of pay for agricultural labour through a long period. The last of these abstracts was made in 1915. But there was in the following years, mainly in consequence of the war which did not fail to have a notable reaction on Norwegian life, so rapid and deep a transformation of the economic life of the country that the need of following the movement of wages more closely was felt. In so far as specifically concerns the field of agriculture, the Norway's Weal Society (*Selskapet for Norges Vels*) is responsible for a careful collection of data referring to wages for the chief forms of agricultural labour in the years 1915-16, 1916-17, 1917-18 and 1918-19. On the other hand, the Central Office of Statistics (*Statistiske Centralbyrå*) has conducted an enquiry into wages and living conditions in Norway during the war, and has thus brought together numerous data as to private and public wages and salaries in April 1918 as compared with April 1914.

Although these various authorities do not allow complete comparisons, they yet allow us to trace with sufficient exactness the rise in agricultural wages in Norway, which was from 1880 onwards a regular process, but has in recent years, under the impulse of the new conditions due to the war, made a very appreciable upward leap.

We think it well to precede our examination of the data referring to wages with some notes as to the position of agricultural wage earners in Norway.

§ 1. AGRICULTURAL WAGE EARNERS IN NORWAY.

Agriculture is in Norway the predominant occupation: according to the census of 1910, of 923,047 occupied persons, 288,322 applied their activity to cultivating the soil and raising live stock. The case being one of a country in which small holdings are much subdivided, for reasons of history and natural exigencies, the landowning farmer is a very common type. According to the figures of the last census, the group of independent farmers, of which landowning farmers constitute the majority but which also includes tenant farmers, is as large as, and even slightly larger than, that of mere labourers. There are for 1910 the following data with regard to the persons occupied by agriculture:

Independent farmers	144,190
Salaried employees, etc.	3,864
Labourers	140,268
<hr/>	
Total	288,322

There seems to have been during the last twenty years for which we have data a conspicuous tendency towards the increase of the number of independent farmers and the decrease of that of labourers: the number of the former rose from 122 050 in 1890 to 124,098 in 1900 and 144,190 in 1910, while that of the latter fell from 190,564 in 1890 to 161,744 in 1900 and 140,268 in 1910. It is however necessary to receive these figures with a certain caution, for the data obtained by the various census are not completely comparable.

As regards the growth of the class of independent farmers, which is exclusively due to the increased number of landowners (109,132 in 1890, 114,578 in 1900 and 133,787 in 1910), the different principles on which the statistical abstracts have been made must be taken into account. In 1880 and 1890 a census of population and a farming census were made together: persons having another trade than agriculture were not taken to be landowning farmers if they possessed less than three cows, while a person who was at once a landowner and an employee had to possess at least five cows if he were to be included among landowning farmers. In 1910, on the other hand, there was no farming census, and as many landowning farmers as were declared must be taken to have existed. A more exact idea of the development of this class can be obtained from the following figures, derived from farming census which included only landowners whose principal occupation was farming: of such there were 108,668 in 1890, 111,933 in 1900 and 114,033 in 1907.

The decrease in the number of labourers, moreover, was probably less than appears from the census figures. We will not now analyse in this connection, by an examination of the data referring to single groups of wage-earners, the motives for doubting conclusions from these figures. It may in any case be taken as certain that until 1910 and afterwards an increase was found to have occurred in the number of landowners, an increase promoted in recent years by propaganda work and legislation intended to encourage the passage of land to the ownership of labourers. There is equal certainty as to the decrease in the number of labourers, which is largely due to a strong current of emigration, especially transatlantic emigration, and to urbanism on a large scale. In Norway, no less than in other countries, the phenomenon of a rural exodus has constituted a serious preoccupation. But there is reason to believe that the war, which almost did away with transatlantic emigration and caused many emigrants to return home, in that it rendered conditions in towns more difficult and caused a demand, in the interests of the very life of the country, for the exercise of the greatest possible effort for agricultural production, has recently reinforced the supply of agricultural labour in the Norwegian countryside. We have no definite statistical data on this point, but it may be arrived at indirectly from the fact that the rural population underwent an extraordinary increase in 1917, the last year for which there are available data. While, as the following figures show, there was a continuous rural exodus from 1891 onwards, the position now seems to be radically changed.

Rural Population

Period	Increase as by birth-rate	Actual increase	Difference between increase as by birth-rate and actual increase
—	—	—	—
1891 to 1895	98,892	33,414	— 65,478
1896 to 1900	107,548	53,773	— 53,775
1901 to 1905	107,091	44,586	— 62,505
1906 to 1910	101,953	45,607	— 56,346
1911 to 1915	101,912	51,768	— 50,144
1891 to 1915	517,396	229,148	— 288,248
1916	23,510	15,035	— 8,475
1917	22,489	78,291	+ 55,802

It thus seems allowable to conclude that the class of agricultural labourers is today even more important to the economic life of Norway than it was shown to be by the figures of the last census, according to which it absorbed more than 15 per cent. of the country's whole population.

Having made these general remarks, we will pass to an examination of the individual classes of wage earners and their wages. Norwegian trade statistics distribute agricultural labourers, as distinct from independent farmers, in the following groups : foremen (*Gaardeskarer*), labourers' sons and daughters living with them and working on the soil, farm workers, both men and women, *husmaend* and journeymen. The statistics as to wages show what pay is given to the three latter groups which we will treat separately.

2. MEN AND WOMEN FARM WORKERS.

These are the workers receiving fixed wages. The last census give their numbers as follows :

Year	Men	Women
—	—	—
1890	20,770	38,011
1900	19,438	25,596
1910	19,190	16,007

As is seen, both groups decreased progressively but that of the women most noticeably. It seems to be beyond doubt that this decrease actually took place ; but there is reason to believe that the figures do not accurately

reflect the intensity of the phenomenon. This is because the distinction between persons employed on agricultural labour and those in domestic service in the country is very difficult to make and is uncertain. As to these two classes we have the following figures.

Year	Men			Women		
	Employed on agriculture	In domestic service	Total	Employed on agriculture	In domestic service	Total
1890	20,770	2,688	23,458	38,011	23,119	61,130
1900	19,438	572	20,010	25,596	30,960	56,556
1910	19,190	346	19,536	16,007	39,196	55 203

It seems as though the principles of classification observed in the various census were not entirely identical, and the actual diminution of the number of workers employed on agriculture may thus have been somewhat less than appears from the figures given above.

Men and women workers are lodged and boarded freely, and sometimes also receive allowances in kind, which explains, at least partly, the low level at which their cash wages were long maintained and, comparatively speaking, are still maintained. From one five-year period to another these wages have nevertheless gradually increased, so that in 1915 they stood at a figure more than double that of 1885. In the case of women the increase was comparatively larger. We show in Table I the cash wages and the estimated value of allowances in kind paid from 1885 to 1915, and the respective percentages by which these payments increased from five years to five years throughout this period.

TABLE I. — *Cash Wages and Estimated Value of Allowances in Kind Annually received by Farm Workers from 1885 to 1915.*

(A) *Amounts of Wages in Crowns.*

	1885	1890	1895	1900	1905	1910	1915
Men :							
Cash wages	163	169	180	218	234	291	374
Estimated value of payments in kind	—	—	176	193	196	226	296
Women :							
Cash wages	73	77	85	100	114	148	193
Estimated value of payments in kind	—	—	141	156	159	183	240

(B) *Percentages of Increase.*

	1885 to 1890	1890 to 1895	1895 to 1900	1900 to 1905	1905 to 1910	1910 to 1915	1885 to 1915	1895 to 1915
Men :								
Cash wages.	4	7	21	7	24	29	129	108
Estimated value of allowances in kind.	—	—	10	2	15	31	—	68
Women :								
Cash wages.	5	10	18	14	30	30	164	127
Estimated value of allowances in kind.	—	—	—	2	15	31	—	70

It should be noticed that the figures reproduced are those of general averages for the whole kingdom, but the actual figures every year differ noticeably from district to district. Men's annual wages varied in 1885 from a minimum of 117 crowns to a maximum of 204 crowns, in 1890 from 122 to 211 crowns, in 1895 from 117 to 241 crowns, in 1900 from 142 to 296 crowns, in 1905 from 164 to 312 crowns, in 1910 from 211 to 371 crowns, and in 1915 from 276 to 470 crowns. Similarly women's wages varied from 57 to 86 crowns in 1885, from 62 to 105 crowns in 1890, from 63 to 119 crowns in 1895, from 72 to 147 crowns in 1900, from 76 to 159 crowns in 1905, from 90 to 200 crowns in 1910 and from 128 to 270 crowns in 1915. The minima were paid to men in North Bergenhus throughout the period; to women in Stavager in 1885, in Nordland in 1890, 1895, 1905 and 1915, and in Tromsø in 1900 and 1910. The maxima were paid to men in Finnmarken in 1885 and 1890, in Jarlsberg and Larvig in 1895, 1900 and 1905, and in Bratsberg in 1910 and 1915; and to women in Jarlsberg and Larvik in 1885, 1900 and 1905, in Akershus in 1885, 1890 and 1895, in Finnmarken in 1885, and in Buskerhud in 1915. It may therefore be said that the highest rates of wages predominated in East and the lowest in West Norway.

The rise in wages, continuous from 1885 onwards and accentuated in the decade between 1905 and 1915, has since been increasingly rapid and pronounced. The figures in Table II, which are taken from the annual enquiry made by the Norway's Weal Society, allow this development to be followed through the summer and winter farming seasons of 1915-16, 1916-17, 1917-18 and 1918-19.

In contrast to the changes realized in the previous thirty years, the increase during these last years was proportionately greater for men than for women. The wages of the former, which increased by 129 per cent. between 1885 and 1915, increased during the last four farming seasons by 154 per cent., while the corresponding increases in women's wages were of 164 and 124 per cent.

TABLE II. — *Cash Wages of Farm Workers from 1915-16 to 1918-19.*(A) *Amounts of Wages in Crowns.*

	1915-16	1916-17	1917-18	1918-19
Men				
Summer half-year	242	310	423	586
Winter half-year	159	224	307	433
Whole year	391	511	694	995
Women:				
Summer half-year	120	144	192	264
Winter half-year	91	113	153	214
Whole half-year	202	249	328	452

(B) *Percentages of increase.*

	1915-16 to 1916-17	1916-17 to 1917-18	1917-18 to 1918-19	1915-16 to 1918-19
Men:				
Summer half-year	28	36	39	142
Winter half-year	41	37	41	172
Whole year	31	36	43	154
Women:				
Summer half-year	20	33	38	120
Winter half-year	24	35	40	135
Whole year	23	32	38	124

The largest percentage of increase in wages during the four years occurred in the case of men in the district of Vestfold (179 per cent.), in that of women in the district of Finnmark (252 per cent.) ; while this percentage was smallest for men in the district of Troms (121 per cent.), for women in the district of Osfold (98 per cent.).

The highest wages were paid to men throughout the period in the district of Telemark, to women in 1915-16, 1917-18 and 1918-19 in Vestfold and in 1917-18 in Buskerud. The lowest wages were paid to men in 1915-16 and 1917-18 in the district of Sogn and Fjordane, and in 1916-17 and 1918-19 in that of More; while to women they were paid in 1915-16 in the district of Troms, in 1916-17 and 1917-18 in that of Nordland, and in 1918-19 in those of Nordland and Troms.

The statistical data of the Norway's Weal Society are confirmed by the following figures, which were compiled from the results of an enquiry

into wages and living conditions in Norway during the war, conducted by the Central Office of Statistics, and which refer to average monthly wages paid in April 1914 and April 1918.

	April 1914 (crown)	April 1918 (crown)	Percentage of increase
Men .			
from 17 to 19 years old	26	59	127
" 20 " 24 " "	36	80	122
" 25 " 54 " "	42	93	191
Women .			
from 17 to 19 years old	14	26	86
" 20 " 24 " "	18	32	78
" 25 " 54 " "	19	33	74

§ 3. "HUSMÆND" AND JOURNEYMEN.

The *husmænd* constitute in Norway a special class of agriculturists who receive from a landowner tenancy for life or a term of years of a piece of land, and incur the obligation to give their labour, to a variously determined extent, to the head-farm, in return for a wage which normally is low.

In the eastern part of the country the *husmænd* as a rule receives his lot without liability to pay a due for entry on it; its buildings belong to the head-farm but he is bound to repair them; he is obliged to give his labour constantly except on one or two days a week; the annual rent for his lot is a cash rent and is usually deducted from the wages due to him for his work. Besides his wages, which are fixed by contract, the labourer has the right to pasture his cows and sheep on the head-farm, and generally has turbary and the right to take firewood, the use of the landowner's horses for the ploughing of his land, the right to receive seed and seed-potatoes at reduced rates, etc. Contracts are now almost always made for a year, with a reciprocal right of terminating them, but the labourer usually stays a long time on his lot.

In the western districts the *husmænd* conforms to a slightly different type. Sometimes he has to pay a small due for entry on his lot; he generally owns the buildings which he buys from his predecessor or inherits from his father or puts up himself, and he is responsible for their repair. He sometimes has the right of pasturage on the head-farm, but seldom the right to firewood, to the use of draft-animals, etc. Contracts are normally for life. The annual rent is partly in cash and partly in days of work. The work rendered as a due is concentrated in a determined number of days during the sowing and harvest and the mowing seasons; and the *husmænd* has no further obligation to the head-farm but is free to find work where he chooses.

The special position of the *husmænd*, who is at once a tenant and a compulsory labourer, explains his low rate of pay, for his pay is not in reality the principal part of his earnings but merely an accessory income

providing for his cash expenditure. His economic position is based on the profits of his husbandry, his fishing, his forestry, his domestic industries, etc.

But in so far as he gives labour in return for a cash payment, he undoubtedly enters into the category of wage-earners whom we are considering.

The *husmånd* class, which is characteristic of Norwegian agriculture and was once one of its essential elements, is however gradually disappearing. In spite of legislative attempts to harmonize with our times the contractual relation, which arose in different conditions and which betrays its mediaeval origin, the figures of the census are clear proof of this disappearance. The number of the *husmånd* fell :

from	67,396	in	1855
to	60 492	»	1865
»	52 826	»	1875
»	29,653	»	1890
»	27,319	»	1900
»	19,811	»	1910

Side by side with the *husmånd* there is the journeyman proper, who may or may not be boarded by the landowner, the rate of his wages varying accordingly. The figures of the trade census, made on the occasion of the population census, show that in this category of labourers also there has been an appreciable decrease, during the last twenty years for which there are known data. The number of day-labourers fell :

from	24,347	in	1890
to	19,072	in	1900
and to	16,990	in	1910.

There is however no lack of reasons for doubting the accuracy of these statistics. The census includes a group of " journeymen ", not further specified, which contained, for the rural districts, 5,294 persons in 1890, 10,029 in 1900 and 10,263 in 1910. If for these respective years these figures be compared with those referring to " agricultural journeymen ", a suspicion arises that some agricultural journeymen have been included in the generic category, and that the actual diminution of their class, especially between 1890 and 1900, has been less than would appear.

Table III shows the average daily wages of *husmånd* and of men and women day-labourers, every five years from 1885 to 1915, distinguishing between labourers as they are boarded by the landowners or not, and between summer and winter work. It also shows the percentages by which wages increased.

TABLE III. — *Daily Wages of "Husmånd" and Journeymen from 1885 to 1915.*(A) *Amount of Wages in Crowns.*

		1885	1890	1895	1900	1905	1910	1915
<i>Husmånd:</i>								
Not boarded	winter	1.18	1 34	1.46	1.64	1.67	2.23	2.80
	summer	0.93	1 00	1.15	1.27	1.33	1.87	2.33
	average	1.05	1.11	1.31	1.45	1.50	2.05	2.57
Boarded . .	winter	0.63	0 71	0.87	1.03	1.06	1.58	1.90
	summer	0.41	0.45	0.57	0.71	0.73	1.20	1.49
	average	0.52	0.58	0.72	0.87	0.90	1.39	1.70
<i>Men day-labourers:</i>								
Not boarded	winter	1.94	—	2.10	2.37	2.50	2.94	3.85
	summer	1.42	—	1.58	1.82	1.92	2.35	3.25
	average	1.68	1.73	1.84	2.10	2.21	2.65	3.55
Boarded . .	winter	1.22	—	1.38	1.63	1.73	2.08	2.82
	summer	0 76	—	0.90	1.11	1.19	1.53	2.26
	average	0.99	1.04	1.14	1.37	1.46	1.81	2.54
<i>Women day-labourers:</i>								
Not boarded	winter	1.12	—	1.23	1.56	1.42	1.66	2.17
	summer	0.84	—	0.93	1.02	1.08	1.29	1.78
	average	0.98	1.02	1.08	1.19	1.33	1.48	1.98
Boarded . .	winter	0 62	—	0.72	0.84	0.89	1.06	1.42
	summer	0.41	—	0.49	0.59	0.64	0.81	1.11
	average	0.52	0.55	0.61	0.72	0.77	0.94	1.27

(B) *Percentages of Increase.*

		1885 to 1890	1890 to 1895	1895 to 1900	1900 to 1905	1905 to 1910	1910 to 1915	1885 to 1915
<i>Husmånd;</i>								
Not boarded	summer	14	9	12	2	34	26	137
	winter	8	15	10	5	41	25	151
	average	11	12	11	3	37	25	145
Boarded . .	summer	13	23	18	3	49	20	202
	winter	10	27	25	5	64	24	263
	average	12	24	21	5	54	22	227
<i>Men day-labourers:</i>								
Not boarded	summer	—	—	13	5	18	31	98
	winter	—	—	15	5	22	38	129
	average	3	6	14	5	20	34	111
Boarded . .	summer	—	—	13	6	20	36	131
	winter	—	—	23	7	29	48	197
	average	5	10	20	7	24	40	157
<i>Women day-labourers:</i>								
Not boarded	summer	—	—	11	4	17	31	94
	winter	—	—	10	6	19	38	112
	average	4	6	10	5	18	34	102
Boarded . .	summer	—	—	17	6	19	34	129
	winter	—	—	20	8	27	37	171
	average	6	11	18	7	22	35	144

TABLE IV — *Maximum and Minimum Cash Wages of Boarded Labourers.*

Years	Summer			Winter		
	Crowns	Districts	Maxima	Crowns	Districts	Minima
1885.	0.85	North Bergenhus	Smaalene	0.58	South Bergenhus	Hedemarken
1890.	1.30	Tromsø	Kristians	0.67	Nordland	Kristians
1895.	1.20	Lister and Mandal	Kristians	0.81	North Bergenhus	Kristians
1900.	1.56	Tromsø	Smaalene	1.20	Tromsø	South Trondhjem
1905.	1.68	Tromsø	Smaalene	1.34	Trøndelag	South Trondhjem
1910.	2.50	Finnmarken	Hedemarken	3.00	Finnmarken	South Trondhjem
1915.	3.50	Finnmarken	Smaalene	4.00	Finnmarken	South Trondhjem
<i>Men Day-Labourers</i>						
1885.	1.95	Finnmarken	Smaalene	1.21	Finnmarken	Kristians
1890 (2).	—	—	—	—	—	—
1895.	2.08	Finnmarken	Hedemarken	1.38	Finnmarken	North Trondhjem
1900.	2.20	Finnmarken	Akershus	1.64	Finnmarken	Kristians
1905.	2.29	Finnmarken	Akershus	1.72	Finnmarken	Akershus
1910.	2.83	Finnmarken	Akershus	2.26	Finnmarken	Kristians
1915.	3.78	Tromsø	Akershus	3.40	Finnmarken	Kristians
<i>Women Day-Labourers</i>						
1885.	1.02	Finnmarken	Smaalene	0.76	Finnmarken	Romsdal
1890 (2).	—	—	Hedemarken	—	—	—
1895.	1.06	Finnmarken	Kristians	0.88	Finnmarken	Kristians
1900.	1.19	Finnmarken	Hedemarken	0.89	Finnmarken	South Trondhjem
1905.	1.17	Finnmarken	Kristians	0.91	Finnmarken	Northland
1910.	1.30	Finnmarken	Kristians	1.05	Finnmarken	Kristians
1915.	1.72	Stavanger	Nordland	1.40	Finnmarken	South Trondhjem

(2) For 1890 details as to summer and winter wages are lacking. Altogether, for the whole year, the maximum for men was 1.69 crowns (Finnmarken) and the minimum 0.79 crowns (Kristians), while for women the maximum was 0.89 crowns (Finnmarken) and the minimum 0.59 crowns (Hedemarken).

TABLE. V. -- *Daily Wages of Day-Labourers from 1915-16 to 1918-19.*

		Amounts of wages in crowns				Percentages of increase			
		1915-16	1916-17	1917-18	1918-19	1915-16 to 1916-17	1916-17 to 1917-18	1917-18 to 1918-19	1915-16 to 1918-19
Men day-labourers:									
Not boarded	Summer half-year	3.64	4.95	7.13	9.67	36	44	36	166
	{ Sowing								
	{ Mowing	4.00	5.44	7.86	10.20	36	44	31	157
	{ Reaping	3.64	4.97	7.27	9.85	37	40	35	170
Boarded	Winter half-year	3.32	4.83	6.87	9.28	45	42	35	180
	{ Other work								
	{ Sowing	3.08	4.53	6.20	8.26	47	37	33	158
	{ Mowing	2.51	3.33	4.80	6.64	33	44	38	164
Boarded	Summer half-year	2.95	3.89	5.60	7.43	32	44	33	152
	{ Reaping	2.49	3.35	4.85	6.73	35	45	39	170
	{ Other work	2.37	3.19	4.50	6.16	35	41	37	160
	Winter half-year	1.81	2.71	3.86	5.30	50	42	37	193
Women day-labourers:									
Not boarded	Summer half-year	2.12	2.76	3.93	5.41	30	42	38	155
	{ Sowing								
	{ Mowing	2.35	2.96	4.21	5.92	26	42	41	152
	{ Reaping	2.22	2.86	4.17	6.00	29	46	44	170
Boarded	Winter half-year	2.00	2.65	3.66	5.20	33	38	42	160
	{ Other work								
	{ Sowing	1.84	2.41	3.33	4.84	31	38	45	163
	{ Mowing	1.30	1.71	2.39	3.36	32	40	41	158
Boarded	Summer half-year	1.58	1.95	2.73	3.79	27	40	39	146
	{ Reaping	1.42	1.85	2.65	3.86	30	43	46	172
	{ Other work	1.18	1.57	2.18	3.19	33	39	45	170
	Winter half-year	1.02	1.34	1.87	2.63	31	40	41	158

Since the figures reproduced represent averages for the whole kingdom, we have thought it well to show, for the individual years considered, the maximum and minimum wages paid in single districts, and therefore we give in Table IV these maxima and minima and the names of the districts in which they occurred. These data refer to the wages of labourers boarded by the landowners. Those regarding other labourers vary proportionately in much the same measure.

It is seen that the wages of all these categories of workmen have risen continuously, the rise being during the thirty years proportionately greater for the *husmånd* than for the day-labourers, and for the men day-labourers than for the women day-labourers. In general, the highest wages are paid in the western and the lowest in the eastern part of Norway.

The statistics collected by the Norway's Weal Society allow us, in the case of men and women day-labourers, to follow year by year, from 1915-16 to 1918-19, the later and very considerable rise in wages. These statistics do not merely distinguish between boarded and other labourers and between summer and winter work, but also consider separately, in the case of the work of the summer half-year, sowing, mowing reaping and other works. The figures in Table V are taken from these statistics and show average wages for the kingdom and the percentages of increase from one year to another, throughout the whole period considered.

The highest wages seem to have been paid to men throughout, and to women from 1915-16 to 1917-18, during the mowing season. In 1918-19, however, women received highest wages for reaping. In the case of both sexes the lowest wages are paid for winter work.

The data at our disposal do not show the maxima and minima between which wages varied in the different districts in single years. It appears however that for mowing the maxima were paid to men throughout the period and to women in 1915-16, 1916-17 and 1917-18 in the district of Finmark, and to women in 1918-19 in that of Rojaland; while the minima were paid to men and women, in 1915-16, 1916-17 and 1917-18, in the district of Opland, and 1918-19 to men in the District of Sogn and Fjordane and to women in the districts of Opland and Nordland. For miscellaneous work in the summer half-year the maxima also occurred in the district of Finmark, except in 1918-19 when women received highest wages in that of Rojaland. Minima were paid to men in the district of Opland in 1915-16 and 1916-17, in those of Opland and Nord Trondelag in 1917-18 and in that of Sor Trondelag in 1918-19. Women received minima in the district of Opland in 1915-16 and 1916-17, in Nordland in 1917-18, and in Opland in 1918-19. The maxima for winter work were received by men in the district of Finmark in 1915-16 and 1916-17 and in Vest Agder in 1917-18 and 1918-19, and by women in the districts of Finmark and Telemark in 1915-16, Finmark in 1916-17, Vestfold in 1917-18 and 1918-19. Men received minima for winter work in Opland in 1915-16, 1916-17 and 1918-19 and in Trondelag in 1917-18, and women in Opland in 1915-16, 1916-17 and 1917-18 and in Finmark in 1918-19.

It is seen that the rising tendency has been most marked in those parts of Norway in which wages were comparatively low.

The results of the researches of the Society for Norway's Weal are in full agreement with the data collected by the Central Office of Statistics on the occasion of the enquiry into wages and living conditions during the war. According to these data the average daily wages of journeymen agricultural labourers rose between April 1914 and April 1918 from 2.39 crowns to 4.95 crowns in the case of men and from 1.10 crowns to 2.37 crowns in that of women, the percentages of increase being 107 and 116, respectively.

§ 4. THE GENERAL POSITION OF LABOUR.

The considerable increases in the wages of agricultural as of other labourers found to have taken place in Norway should be considered in relation to the increased cost of living, for entirely erroneous conclusions as to the facts of the situation might otherwise be reached.

On the basis of calculations made by the Central Office of Statistics, it is concluded that the cost of living had risen since before the war by 1.40 per cent. in 1918 and by 176 per cent. in 1919. Compared with this rise, the increase in agricultural wages seems to be such as more or less to counterbalance the increased need. The position of agricultural labourers, which was usually economically inferior, before the war, to that of urban workers, seems to be substantially unchanged, in spite of the apparently very high pay. It therefore seems not improbable that in the near future the competition for labour of industry and of agriculture will be resumed in Norway, and there are some who already prophesy that the State will be obliged to intervene in order to prevent a decline, due to a deficient labour-supply, of the cultivation which the war has intensified.

SWITZERLAND.

THE FOOD-SUPPLY CRISIS AND STATE ACTION TO OVERCOME IT (1914-1919).

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I. — THE POSITION OF SWITZERLAND WITH REGARD
TO THE FOOD-SUPPLY BEFORE AND AFTER THE WAR.

Switzerland, particularly on account of its geographical formation and in spite of the well known advanced state of its agriculture, is a country which depended before the war on foreign countries, as regarded its food-supply.

The following table, compiled from data in the Agricultural Year-book of Switzerland for 1917, shows the values in money which represented this dependence from 1911 to 1916.

TABLE I — *Importation of foodstuffs into Switzerland
from 1911 to 1916.*

Year	Wheat	Other agricultural products	Butchers' stock	Other animal products	Sugar	Other cattle
Thousands of francs						
1911	110,135	209,773	45,021	121,242	40,004	58,778
1912	120,653	216,673	52,000	122,537	50,903	65,941
1913	129,175	214,940	42,560	105,867	40,197	66,516
1914	118,687	176,340	19,537	74,490	43,774	59,438
1915	176,091	171,307	3,912	53,924	43,643	85,951
1916	302,502	176,678	1,632	53,863	84,577	105,688

These figures must be compared with the figures showing the exports of foodstuffs, such exports being almost entirely dairy products, namely cheese, condensed milk and chocolate.

The following figures show these exports from 1911 to 1916.

TABLE II. — *Exportation of foodstuffs from Switzerland
from 1911 to 1916.*

Year	Products of the soil	Animal products	Including		Other cattle	Including Chocolate
			Cheese	Condensed milk		
Thousands of francs						
1911	7,421	110,163	63,157	38,533	56,544	47,111
1912	11,369	122,157	64,717	47,099	64,575	55,232
1913	5,991	125,717	70,129	44,195	69,346	58,171
1914	7,960	121,861	66,321	47,419	64,571	55,334
1915	15,582	130,283	72,892	46,883	113,637	90,733
1916	27,628	142,925	66,506	57,296	109,280	80,637

The enormous progressive increase shown by these figures does not depend on an increase in the exports and imports of foodstuffs, which are constantly diminishing, but on the uninterrupted rise in prices caused by all the economic factors which have determined this phenomenon everywhere, namely the scarcity of foodstuffs consequent on lessened production due to the lack of labour and the diminished fertility of the soil which has little by little come to lack the elements essential to high productiveness, chemical manures and fertilizers. The increase also depends on the depreciation of money, the astounding rise in maritime freights, and the enormous consumption of the armies mobilized by almost all States. In Switzerland the price of 100 kilogrammes of wheat followed from 1914 to 1917 the following rising curve:

1914	24.53 francs	1916	44.65 francs
1915	38.34 "	1917	60.19 "

If 100 stand for the average price of wheat from 1900 to 1909, the following numbers stand for its average price from 1913 to 1916.

1910	108.66	1914	118.92
1911	105.76	1915	183.68
1912	120.64	1916	226.81
1913	111.96		

The average home production of foodstuffs from 1908 to 1912 was of 2,784,137 tons, namely 1,324,858 tons of vegetable and 1,423,279 tons of animal products. The average consumption in the same period was of 3,463,790 tons, namely 2,033,018 tons of vegetable and 1,430,772 tons of animal products. The total excess of imports over exports to meet the needs of the country was 715,653 tons, namely 708,159 tons of vegetable and 7,493 tons of animal products.

These data show that in the period immediately before the war Switzerland received from abroad altogether about a quarter of her food-supply.

Her dependence on foreign countries is shown by the following figures (1):

TABLE III. — *Swiss Imports of Wheat from 1913 to 1919.*

1913	1914	1915	1916	1917	1918	1919
quintals.						
5,292,278	4,408,991	4,824,991	5,979,663	2,617,308	576,580	1,404,301
thousands of francs						
129,175	118,687	176,091	302,509	167,964	46,410	110,462

(1) See for the years down to 1916 the *Annuaire international de Statistique agricole* 1915 et 1916, published by the International Institute of Agriculture, Rome, 1917, and the *Annuaire statistique de la Suisse*, Berne, July 1918. For later years the data referring to quantities and values have been supplied by the statistical department of the International Institute of Agriculture.

The imports of wheat kept up to their normal level, that corresponding to the needs of Switzerland, until 1916, after which date, in the very next year — 1917 — they were suddenly diminished, and in 1918 they were reduced from an average annual quantity of 5 million quintals during the previous period to hardly 576,000 quintals. This enormous decrease, largely due to the intensification of the submarine warfare, was met by an effort to increase home production by every means, in order to cover, at least in part, the deficit in Swiss supplies.

In the following paragraphs an attempt is made to note and throw light on the effort made by the Swiss Federation in the field of rural economy, an effort aimed at facing the very grave economic crisis produced by the reduction of imports of foodstuff which endangered the victualling of the country.

II. — FROM THE OUTBREAK OF WAR UNTIL THE END OF 1916.

The federal authorities immediately understood the gravity of the situation determined by the outbreak of the European war: Switzerland, enclosed in the midst of belligerent powers, with an agricultural production unequal to her own needs, almost without primary material, was undoubtedly more unfavourably placed than any other neutral country. The Federation could not, moreover, count absolutely on imports since these depended not only on the available overseas supplies of foodstuffs but also on the available tonnage and on permissions to pass through neighbouring States. The public authorities had at once to turn their attention to home resources with a view to increasing yield and thus neutralizing, as far as possible, the danger that in the unfavourable conditions home production would largely and injuriously decrease.

The work done by the Federal authorities can be distributed in two periods — the years between the declaration of war and the intensification of the submarine campaign, that is from 1914 to the end of 1916, and the years from 1917 onwards.

It should at once be noticed that in Switzerland as in all Europe the most critical time occurred in the second period, the crisis culminating in 1918.

It is clear that the varying force of the pressure of the war in the two periods had a necessary effect on the bearing of the provisions of the Swiss government. In the first period provisions were more or less voluntary; in the second they were characteristically general and compulsory.

§ I. NATURE OF PROVISIONS IN THIS PERIOD.

The provisions of this period tended, on the one hand, to keep intact and if possible to increase the production of articles necessary to the victualling of the country, and on the other hand to ensure a judicious use of stored supplies.

The measures to be adopted were first discussed in conferences in

which delegates of the cantonal authorities and representatives of the producers' and consumers' associations took part. In addition, by means of circulars and communications to the daily press and the agricultural journals, an endeavour was made to give useful advice of all kinds, to enlighten the people as to the economic situation, and to induce farmers to adapt their farms to the needs of the moment. The Federal stations of experiment and agricultural analysis, for their part, contributed as far as possible to keeping farmers informed and freely supported them in the matter of obtaining seed which would produce a higher yield.

Generally speaking, the Federation sought to increase agricultural production not forcibly but by getting into touch with cantonal authorities and agricultural associations and collaborating with them. It was also a constant preoccupation of the cantonal authorities to supply agriculture with its indispensable material, such as manures, grain for seed and concentrated forage. But these efforts often could not attain to adequate success, owing to the insurmountable difficulties met with abroad.

In this first period Swiss agriculture succeeded in supplying the country with a large part of the foodstuffs necessary to victualling, and was even able to export a certain quantity of products, especially those of the dairy industry, and also those of the stock-farming and the timber industry, for which articles the authorities were very glad to obtain compensatory imports. The Swiss Union of Cheese Exporters, founded at the beginning of the war, obtained the best results in the matter of organizing exportation and of supplying the population, at moderate prices, with fresh milk and other dairy produce. The exports of milk and cheese continued, although diminishing, to be important in the first years of the war, as appears from the following figures :

TABLE IV. — *Exportation of Milk and Cheese.*

Year	Fresh milk		Condensed milk		Hard cheese	
	Quantity	Value	Quantity	Value	Quantity	Value
1913	181,178 q.	3,564,359 fr.	405,585 q.	44,194,573 fr.	356,822 q.	69,596,339 fr.
1914	179,747 »	3,341,836 »	453,918 »	47,419,383 »	347,848 »	65,882,282 »
1915	186,878 »	3,920,328 »	437,116 »	46,882,561 »	332,111 »	71,972,690 »
1916	158,500 »	—	397,700 »	—	201,700 »	—

As regards home consumption, the Swiss Union of Cheese Exporters supplied the following quantities, extending to 31 July 1917:

During the first year 1914-15	5,912,910	kilogrammes
» » second » 1915-16	5 694,017	»
» » third » 1916-17	14,415,520	»

§ 2. SUPPLY OF CHEMICAL MANURES AND ENCOURAGEMENT TO PRODUCTION OF FOODSTUFFS.

With a view to ensuring to agriculture the quantity of seed necessary to winter and spring cereals, the federal stations of experiment and inspection acted from the autumn of 1914 as intermediaries for the supply of seed. The federations of agricultural syndicates co-operated in this work in order to procure for the whole country the entire quantity of grain requisite for sowing and also, what was more important, to obtain that selected grain should exclusively be used for seed and should be introduced in all districts of the country to the lasting benefit of the harvest yield. No less difficult was the supply of the country with sulphate of copper and such chemical manures as potassic salts, Thomas basic slag and superphosphates. In this matter the results obtained certainly were not such as fully to satisfy Swiss farmers, and it was necessary to have recourse to the system of compensation. It should however be recognized that in this first period at least a large part of the need was successfully covered. Of chemical manures, those of which the importation most decreased were the prepared manures, which from 2,631 carloads of 10 tons each, the quantity imported in 1913, fell to 2,640 carloads in 1914, 1,032 carloads in 1915, 178 carloads in 1916 and only 16 carloads in 1917. Potassic manures, on the other hand, increased considerably, the quantity imported being 1,324 ten-ton carloads in 1913, 1,112 in 1914, 1,257 in 1915, 2,281 in 1916, and 2,063 in 1917. Altogether the total annual import of chemical manures into Switzerland was reduced between the outbreak of war and the end of 1916 from 10,000 to 6,000 carloads.

Pamphlets and circulars of propaganda were circulated in large numbers with a view to inducing the people to increase and develop agricultural production, thus ensuring the country's food-supply. Conferences of federal and cantonal authorities were held for the study of the grave problem in all its aspects. A special Agricultural Commission for the Encouragement of Grain Growing and the Formation of a Grain Monopoly was founded.

The active propaganda work met with good results. According to the estimates and notes made by the Swiss Peasants' Secretariat the area planted in potatoes and grain had at the end of 1917 increased since the beginning of the war by about 20 per cent.; and according to the data of the Federal Office of Statistics the area planted in potatoes, which was 54,500 hectares in 1916, had risen in 1917 to 60,400 hectares.

The decrees of 11 August, 13 September and 6 October 1916 contained important provisions as to the provisioning of Switzerland with potatoes and fruit. These decrees, under which the Central Potato Supply Office was erected, regulate and organize the potato trade.

III. — POSITION AND MEASURES TAKEN IN 1917 AND 1918.

As the tables in the first part of this article clearly show, the true victualling crisis, both Swiss and European, followed on the intensification of submarine warfare, that is to say on the declaration of the blockade by the central empires.

§ 1. THE DEFICIT IN IMPORTS.

The deficit in Swiss imports in 1917, as compared with 1913, was as follows :

1. *Various foodstuffs.* — Breadmaking cereals : a deficit of 25,000 carloads in 1917 as compared with 1913, that is to say of 50 per cent. Butter : a deficit of 500 carloads or 95 per cent. Eggs : a deficit of 1,100 carloads or 80 per cent. Meat and pork : a deficit of 1,800 carloads or 90 per cent. Butchers' live stock : a deficit of 50,000 oxen (100 per cent.) ; 20,000 calves (99 per cent.) ; 10,000 pigs (35 per cent.).

2. *Forage.* — The deficit in forage (oats, maize, barley, etc.) was one of about forty to forty-five thousand carloads. The importation of hay and straw stopped almost entirely.

3. *Chemical manures.* — The importation of these had lessened in 1917, as compared with 1913, by 6,200 carloads. On the other hand two thirds of the need for sulphate of copper could be met.

As regards the *exports* of the chief agricultural products, the figures for 1917 are the following : fresh milk 104,600 quintals (181,178 in 1913) ; condensed milk 278,500 quintals (405,585 in 1913) ; hard cheese 537 quintals (356,822 in 1913).

In the case of live stock only, in view of the lack of forage and their increased value as compensation for imports, the federal authorities could give more numerous permits to export. It was thanks to the valuable compensation thus afforded that Switzerland was able in 1916 to conclude with Germany a profitable economic agreement which ensured her importation of potatoes, Thomas basic slag and potassic salts, among other articles.

§ 2. COMPULSORY DEVELOPMENT OF PRODUCTION.

In consequence of the submarine warfare the importation of foodstuffs from overseas became increasingly uncertain in 1917 and Switzerland saw herself gradually reduced to counting only on her own resources. The problem of intensifying national production by every means was therefore urgent. The Division of Agriculture summoned the agricultural authorities of all the cantons, the delegates of military departments and of public economy, and of the Swiss Peasants' Union and the Swiss insti-

tutes of experiment and of agricultural analysis, to a conference, held in the hall of the States' Council in Berne on 1 February 1917, for the discussion of the steps to be taken in order to reach this intensification. On 16 February 1917 the Federal Council issued a decree, based on the resolutions of this conference and regarding the development of agricultural production. This decree confers on the Department of Public Economy and the cantonal authorities wide powers for ensuring an intensified production of foodstuffs and the utilization of household and farm refuse.

Besides provisions relating to labour and the employment of the land, with which we will deal presently, the decree has special provisions for inducing the population to limit consumption and to promote the improvement of crops, the scientific cultivation of the soil, stock raising, etc.

On 7 March 1917 the Swiss Department of Public Economy published a ruling as to potato growing, according to which new and strict provision was made for increasing potato production.

On 3 September the Federal Council published the decree as to the increased growing of native cereals. Under this decree grain crops had to be sown in the autumn of 1917 and spring of 1918 over an area at least equal to that thus sown according to the Swiss crop census of 4-17 July 1917 of which we will presently speak. The area sown in the autumn had to be at least equal to that sown in the previous year. But in order to ensure the better victualling of the country in the next year, the Federal Council ordered at the same time that the area sown with bread making cereals in the autumn of 1917 should be increased by 50,000 hectares.

Still proceeding in chronological order, we notice the federal decree of 17 December 1917 as to ascertaining the available quantities of potatoes and as to potato growing in 1918, which ordered that the area on which potatoes were grown should be increased by 12,000 hectares. The statistics of July 1917 showed that they were grown on an area of 56,683 hectares, which had in 1918 increased to 70,000 hectares.

The result of applying the Federal Council's decree of 3 September 1917, as to developing the cultivation of native cereals by increasing the area sown in grain by 50,000 hectares, was, as appeared by an enquiry made in March 1918, very successful, especially if the difficulties belonging to the enterprise be taken into account. From a table published in the Tenth Report of the Federal Council to the Federal Assembly as to Measures taken by this Council in force of the Federal Decree of 3 August 1914, which report is dated 24 May 1918, it appears that the enquiry of March 1918 found that the increased sowing covered 66.5 per cent. of the supplementary area of 48,665 hectares attributed to this purpose. In other words the extra sown area measured 32,367 hectares, leaving out of account Appenzell (Lower Rhone) and the Grisons, as to which we have no data. To these figures should be added the results of the spring grain sowing, which would almost bring the yield up to the quantity prescribed.

As early as the beginning of 1918 the Federal Council thought it well

to recast the decree of 16 February 1917 as to the increase of agricultural production.

This most important decree was issued on 15 January 1918, is concerned with the measures intended to develop the production of foodstuffs, and supersedes that of 16 February 1917 which had the same object (1). We will presently resume it more fully. Its general tendency is to place at the disposal of agriculture and the production of foodstuffs all the country's available means and resources. It grants to the cantons the largest powers for the execution of the rules it sanctions, and reserves to the federal authority only some duties of a general order which the cantons could not discharge.

With the object of promoting and intensifying the country's production of foodstuffs the decree orders the institution of a cantonal and of a communal office.

The Cantonal Office for the Intensification of Agricultural Production aims at encouraging all methods of producing foodstuffs, at executing prescribed rules, and at supervising the work of communes, corporations and individuals for the intensification of agricultural production.

The Communal Office for the Increase of Agricultural Production (Agricultural Committee) is responsible for ordering, directing and supervising the execution of the measures prescribed by the federal and cantonal bodies. All the business directly relegated to the department will be remitted for examination and execution to a Central Office for the Intensification of Agricultural Production, which forms a section of the Division of Agriculture.

Among those provisions of the decree in question of which the cantonal offices must supervise the application the most important regards the obligation to cultivate. The Cantonal Office must fix for each commune the extra area on which potatoes are to be grown, in accordance with the Federal Council's decree of 17 December 1917, and must see that orders are obeyed. Landowners and tenants are obliged to grow spring cereals, maize, leguminous plants, potatoes and vegetables of all kinds, etc., on areas not less than those declared at the time of the federal census of cultivated lands made on 4-7 July 1917. Landowners and tenants of cultivable lands are bound as far as possible to supply their own need for vegetables and potatoes with the produce of their land. Owners of horses kept as a luxury are obliged to grow the oats and the forage they need, unless this is impossible. Generally speaking, all land must be used for production. Pleasure gardens, areas used for sport and games, private and public parks, unused building yards and such as are not indispensable, must be cultivated and be planted preferably with potatoes and vegetables. For enforcing the execution of this and other measures the cantons are given the necessary full powers. They may order in respect of

(1) See also the circular to cantonal governments, printed by the Swiss Department of Public Economy and dated 16 January 1918, as to the increase of the production of foodstuffs at which this decree aims.

a particular crop or certain vegetables an intensification of cultivation beyond the limits prescribed by the federal authorities and may order the persons concerned to cultivate a particular lot. In this connection they may place obligations on the communes. Above all they have the right to constrain private individuals, persons in the trade, industrial and commercial enterprises of every kind, associations, societies, institutions and communes to supply, wholly or partially, by cultivating land they own or rent, the needs of their workpeople for foodstuffs and of their draught-animals for fodder.

In this field the federal authority reserves to itself the right to supervise the activity of cantons and itself to dispose of land belonging to the Federation, to impose directly on particular bodies the obligation to cultivate, and to make rules as to the care to be given to cultivation and as to the harvest, remedies for the diseases of plants and the preservation of the products of the soil and of foodstuffs of every kind.

The Federal Council entrusts the superintendence of the application of this provision and of others of which we will speak presently to the Department of Public Economy and the Military Department, to the latter where questions regarding cereals are concerned.

The Department of Public Economy must supervise the execution of the provisions of this decree and order inspections if necessary. The cantons must in their turn keep the department informed as to the provisions made.

Among the special duties incumbent on the cantonal offices we should notice the constitution of agricultural commissions in every commune, the redistribution of the lands of which the cultivation is to be increased, the imparting of information to enterprises as to their obligation to cultivate and the allotment of the necessary land, the making of gardens for vegetable growing in towns and their surrounding country, propaganda work for the intensification of cultivation.

But since a grain harvest of the necessary proportions had to be ensured for 1919, the Federal Council issued on 24 May 1918 a decree of which Articles 44 and 45 determined that landowners and tenants were bound to sow in the autumn of 1918 areas at least equal to these determined by the decree of 3 September 1917 as to the growing of native cereals.

§ 3. AGRICULTURAL LABOUR.

The decree of 16 February 1917 confers large powers on the cantonal (or communal) authorities to enable them to procure the agricultural labour necessary to the cultivation of their lands and the transporting of their harvest by requisitioning all persons fitted for such work. It obliges the inhabitants to lend their aid in turn. Power is also granted to the same authorities to requisition agricultural machinery and draught-animals and to fix compensation. Domestic and farm refuse must be utilized as food for live stock, as manure, or in other ways.

These powers are continued by the decrees issued subsequently. The federal decree of 4 December 1917 also ordered the employment of deserters and law-breakers and the organization, as far as possible, of the civil service for agricultural labour. The lack of primary material increasingly felt in industry, the reduction in the supply of war material abroad, the lessened night work in industry and trades, all contributed to restrain the rural exodus and to find labour for industry.

The decree of 15 January 1918 provides that the cantons may have recourse for their labour supply to all persons suited to agricultural work, and may request their inhabitants mutually to assist each other in their husbandry. Article 18 of the decree provides that schools shall take part in developing the production of foodstuffs. If in spite of these provisions it should prove impossible to find the labour necessary to agriculture and to the execution of urgent land improvements, the Swiss Military Department is bound to provide the labour, rendering available unemployed persons as well as deserters and foreign law-breakers and soldiers of the *Landsturm* and the complementary service, as provided by the Federal Council's decree of 27 October 1917.

§ 4. MANURES, AGRICULTURAL MACHINERY AND OTHER FARMERS' REQUISITES.

On 22 December 1917 the Federal Council issued a decree as to the encouragement and supervision of the manufacture and sale of chemical manures, feeding stuffs, and other auxiliary material utilized in agriculture and its dependent industries. This decree provides that all material which can be used for the manufacture of manures and forage must be collected, and also orders the supervision of the manufacture of and trade in these articles.

The extension of the sown cultivated area by from 70,000 to 80,000 hectares, ordered by the decrees cited, naturally brought about a noteworthy reduction of the production of forage. This deficit was calculated to be of the quantity necessary to the keep of 100,000 heads of live stock. The production of forage, and therewith stock raising, was also hourly more affected by the increasing lack of chemical manures, concentrated cattle-foods and litter for stalls which followed on the extension of the cultivated area under the decree in question.

The decree of 15 January 1918 also contained provisions as to the supply of agricultural machinery, ploughs, draught-animals, etc. As regarded a large share of these requisites the Federation reserved the right to intervene directly by issuing provisions. It was preferable that questions of the kind should be dealt with by a central department, in a position to issue orders for the purchase or manufacture of machinery, implements, utensils, manures, feeding stuffs, etc. The distribution of seed and manures is to be effected by the same department, which also issues executive orders regarding the use of the waste and refuse of private

houses and farms and businesses of all kinds. The cantonal governments are however authorized (Article 20) to requisition agricultural machinery, draught-animals, auxiliary material, etc.

§ 5. PROVISIONS REGARDING LAND IMPROVEMENT AND THE CONSOLIDATION OF HOLDINGS.

In virtue of the decree of 16 February 1917 the cantonal governments, and on their behalf the communal councils in so far as communal territory was concerned, were authorized to let, by compulsion and on behalf of the canton, for 1917 and eventually for 1918 also, agricultural land left uncultivated by its owner or tenant, to cause this land to be cultivated on behalf of the canton, or to hand it over to communes, associations, public enterprises or individuals, on condition it was cultivated in the most scientific way so that its production of foodstuffs was ensured. They were also authorized, when there was a special need for the increase of production, and especially that of root crops and vegetables, to let compulsorily land used for other crops, and to suspend or even cancel leases of cantonal and communal lands with a view to having them cultivated so that the production of foodstuffs was intensified, fair indemnities being paid to previous owners and tenants.

On the basis of the decree of 15 January 1918 the cantonal offices also had to supervise the execution of the provisions which related to measures to be taken in order to obtain land. Cantons and communal councils may compulsorily take on lease, cultivate and cause the cultivation of lands which are badly cultivated or left uncultivated and lands subjected to land improvement during the last ten years with the aid of State grants. They may insist on the improvement of lands susceptible of improvement, and may suspend or cancel leases of lands owned by themselves, with a view to utilizing these for the intensified production of foodstuffs, saving however lands owned by the Federation. Provision for the utilization of these latter is made by the Federal Council or the competent department, in agreement with the Department of Public Economy.

A new impulse to the consolidation of holdings was given by the Federal Council's decree of 23 March 1918 as to the encouragement to be given to this kind of land improvement, while the federal decree of 21 August 1918 contained other provisions for ensuring the country's supply of vegetables.

§ 6. THE SUPPLY OF BUTTER.

During 1917 the butter-supply service was organized. By a decision of 1 June 1917 the Department of Public Economy erected a Central Butter-Supply Office which, although it had only a semi-official character, at once sought to bring the whole production of butter under its control. With this object it entered into an agreement with the Central Federation of Milk Producers in order to found central butter offices, which were gener-

ally supported by the cantonal authorities. The decree of 18 April 1917 completed that of 17 August 1917 as to provisioning the country with milk and dairy produce, giving a much wider competency to the Department of Public Economy. Finally a resolution of 18 August 1917 determined the institution of a Central Office for Milk and its Derivatives, which absorbed the Central Butter Supply Office, taking on its functions and enlarging its sphere of activity. This office was authorized to treat directly with transport enterprises, cantonal authorities and economic and private associations, and by another decision of 18 August the Department of Public Economy subjected the butter trade to the direct control of the office in question.

§ 7. THE FEDERAL VICTUALLING OFFICE.

One of the most important provisions of 1918 regarded the Federal Victualling Office, which was formed by a decree of 13 September 1918 to transact business connected with public victualling, the purchase of forage, the distribution of goods, the fixing of prices, and the opposition to usury in the foodstuffs and forage trade, and was subjected to the Federal Council. A victualling committee, attached to the office, is nominated by the Federal Council and placed under the direction of the head office. It takes part in the preparation of the most important provisions having a general bearing.

The offices of the Department of Public Economy and the Military Department which had charge, before the institution of this Federal Victualling Office, of victualling and the supply and distribution of foodstuffs, have been since 20 September 1918 aggregated to the Federal Victualling Office. They are the Federal Relief Office, the Bread Supply Department, the Department for the Increase of Agricultural Production, the Central Potato Supply Office, the Federal Milk Office, the Federal Central Fats Office, the Meat Supply Department, the Goods Department, the Department for Monopolized Supplies.

The manager of the office received from the Federal Assembly, in virtue of the decree of 11 October 1918 amending that of 13 September 1918 and regarding the institution of the Federal Food Supply Office, authority to take part, as representative of the Federal Council, in the deliberations of the Legislative Councils. At the two sessions of the Federal Assembly he has a consultative voice when business regarding the Food Supply Office is discussed, and has the right to make proposals as to the questions discussed.

The new office at once sought to increase the imports of monopolized and other food supplies, to give to relief work the development demanded by circumstances, and so to modify the distribution of foodstuffs as to bring about not a quantitatively equal distribution among all having a right to such, but a distribution accordant with needs. At the same time and from the moment when it first became active the Federal Victualling

Office promoted, as much as possible, the increase of home production, and at once ordered the total requisitioning of home produce, its rationing, and its distribution to suit circumstances.

Milk rationing had been introduced by the cantons as early as 1 July 1918 but had been unequally applied by them. Rationing was of necessity strictly observed in districts obliged to import milk, but in the producing districts milk was consumed without restriction.

If this condition of affairs could still be tolerated during the summer, the federal milk cards, imposed by the Federal Victualling Office under the decree of 18 April 1918, had to be employed in order to ensure a milk supply in the winter of 1918-19 to large towns and districts poor in milk. At the same time the enjoyment of privileged rations, hitherto granted to certain districts, was abolished or reduced.

§ 8. CENSUS OF CULTIVATED AREA AND LIVE STOCK.

On 16 May 1917 the Federal Council issued a decree as to the statistics of cultivated area, other than vineyards and land under forage crops, to be made between 7 and 14 July of that year with the aid of special census forms.

In order to determine what area was planted in potatoes in the spring of 1918, and to discover if the increased potato growing ordered by Article 10 of the federal decree of 17 December 1917, already cited, was taking place, the Department of Public Economy issued on 17 May 1918 a decree as to the census of lands reserved for potato growing in 1918. Under this decree a general census of lands so reserved became obligatory and also a census of the average number of persons regularly fed on a potato growing farm. The business of these census was closed in all communes on 15 June 1918 and was carried out at the same time as the enquiry as to the areas under spring cereals.

In 1919 the Federal Council ordered the compilation of other statistics as to agriculture in Switzerland, which were separately published in pamphlet form together with those compiled in 1917. We will refer to these statistics later, in dealing with the situation in 1919 and measures then taken.

As regards live stock, the federal decree of 27 December 1918 ordered an extraordinary census for the whole country to be made on 24 April 1919.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL
ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

FACILITIES FOR THE PURCHASE OF CORN-BAGS AND SACKING BY FARMERS.
— *Gaceta Rural*, July 1919.

The acute famine in corn-bags and other packing material has for some years constituted a serious economic problem for Argentine farmers, so much so that the public press has given prolonged and lively attention to the matter. In order to put an end to this deficiency, of which the seriousness seems to be constantly aggravated, the Executive Power has introduced a bill which proposes that the sum of 25,000,000 pesos be invested in the purchase of sacking, bags, etc.

The bill deserves special notice because it would facilitate the purchase by the rural class of this packing material, which has risen to very high prices, in that it would enable small farmers and colonists to buy it from the Government, if necessary by means of long deferred payments.

According to the bill, the Executive Power will be able to buy, in the home country and abroad, and in quantities proportionate to the size of the Argentine harvest, sacking and bags, which it will sell to farmers, to landowners who cultivate their own land, and to colonists who are leaseholders, provided these persons do not hold or farm more than 200 hectares of land.

The sales will be at cost price, plus 10 per cent. of such price which will cover the cost of distribution.

The sale and the distribution will be the responsibility of the Ministry of Agriculture, which will be able to procure the sacking and bags through the dealers in each district. These dealers will have a commission of 5 per cent. but will be obliged to conform to the rules laid down in the law as to quantity and prices.

Payment may be made by the farmers in ready money, or may, as we have said, be deferred. In the latter case purchasers must make out to the Ministry of Agriculture bills falling due in 180 days and bearing half-yearly interest at the rate of $2\frac{1}{2}$ per cent.

The Ministry of Agriculture must see that the law is duly observed, both by farmers and by commercial houses.

UNITED STATES

STATE BUREAUX OF MARKETING. — MAYES (Jewel), in the *Monthly Bulletin of the Missouri State Board of Agriculture*, No. 8, Jefferson City, August 1919.

In twenty-eight States of the American Union there are State bureaux of marketing, created either by special enactment or by general authority of State boards of agriculture or other legally constituted agricultural organ-

izations. These market bureaux work in co-operation with the Bureau of Markets of the United States Department of Agriculture and their principal object is to collect and disseminate information on the marketing of farm products and farm requisites and to assist producer and consumer to promote effective and economic methods of marketing.

The following statement shows the nature of the organization in each state and the range of work carried on :

Alabama — Marketing work is conducted by the Commissioner of Agriculture and Industries. The work was begun under Acts passed in 1915. \$3,800 per annum is appropriated for salaries and other expenses. The Commissioner has power to license wholesale dealers in farm produce and to establish markets.

Arkansas. — An Act passed in 1917 provides for the establishment of a market bureau to be administered by the Commissioner of Mines, Manufactures and Agriculture. The Commissioner is authorized to establish agencies for the sale of farm, orchard, ranch and other products.

California. — Official marketing work was begun in 1915, under an Act passed in that year, which was revised in 1917. The State Market Director has authority to issue labels bearing the seal of the State Market Commission and to promote the organization of co-operative associations (1). Particular attention has been given to plans for financing and otherwise aiding the growers and their organizations in the marketing of dried fruit and citrus crops.

Florida. — The State Marketing Bureau was created by an Act passed in 1917, which appropriates \$15,000 per year for its support.

Georgia. — A law approved in 1917 provided for a Bureau of Markets within the Department of Agriculture and appropriated \$15,000 for its support. In 1918 the appropriation was increased to \$35,000 dollars annually. The Bureau has authority to establish grades and standards, and to assist in the organization of co-operative associations.

Idaho. — The State Department of Farm Markets is the official marketing organization. Work was begun in 1916 under an Act passed in that year, which was amended in 1917. The Department is independent of all other Government departments or institutions in the State. Besides the usual work in connection with marketing the Department protects home-seekers from unscrupulous promoters, maintains an employment bureau for farm labour, and acts as a sales agent for farm property.

Kentucky. — In 1916 a law was passed relating to agricultural extension work in which it was provided that the University of Kentucky should establish in connection with its agricultural extension work a bureau for fostering co-operative marketing.

Louisiana. — There is an official State Marketing Department, under the direction of the Commissioner of Agriculture.

Maine. — A law passed in 1917 provides for the establishment of a Bu-

(1) See *International Review of Agricultural Economics*, July 1918, page 531 and June-July 1919, page 321.

reau of Markets in the Department of Agriculture. \$3,500 annually is appropriated for this work.

Massachusetts. — An Act passed in 1915 and amended in 1916 requires that all cities and towns having a population of 10,000 or more shall provide and maintain public market places to be used by farmers and other persons. The Commissioner of the State Department of Agriculture acts under this law.

Michigan. — A Department of Markets was created by an Act passed in 1915. Appropriations are made by the State Board of Agriculture as needed.

Minnesota. — Marketing investigations are conducted by the Department of Agriculture of the University of Minnesota. The work was begun in 1913. The costs of marketing different classes of products and the methods of co-operative marketing are being studied. Regular annual reports are required from the various co-operative marketing associations.

Missouri. — This is the State which has most recently established a Bureau of Marketing, the law creating one having come into force on 7 August 1919. The Bureau will be administered by the State Board of Agriculture. Special attention will be given to fostering marketing in purchased cattle and farm seeds within the State.

New Hampshire. — A Bureau of Markets in the office of the Commissioner of Agriculture was created in 1917. Only \$200 was appropriated for this service in 1917 and 1918, but the appropriation has since been increased to \$2,000.

New Jersey. — The Agricultural Law of 1916 provides for a Bureau of Lands, Crops and Markets but does not specify in detail the duties of the Bureau. Funds are supplied from the appropriation of the State Department of Agriculture.

New York. — The State Department of Farms and Markets has a Division of Foods and Markets, which investigates the cost of food production and marketing, conducts and supervises auction markets, investigates complaints and transportation delays, establishes markets, general and local, and encourages co-operation.

North Carolina. — The marketing work of the State is conducted by the Division of Markets and Rural Organization, which was established in September 1913, under authorization of a resolution of the Board of Agriculture placing the marketing work under a "joint committee for agricultural work," with an appropriation of \$11,000. Laws passed in 1915 gave special legal authority for conducting certain branches of work in connection with marketing and credit. The 1919 appropriations, provided from Federal and State funds, amounted to \$20,000. The work of the Division includes, besides the usual marketing work, the organization and supervision of co-operative marketing organizations and credit unions.

Ohio. — The Bureau of Markets and Marketing was created under an Act passed in 1917. Amongst other functions the Bureau arbitrates controversies between producers and distributors and assists in the organiza-

tion of co-operative associations. It is supported by funds from the State Board of Agriculture.

Oklahoma. — The State Marketing Commission was created by an Act passed in 1917 and is supported by appropriations. The Commission appoints agents in large cities to direct the selling of shipments from county associations, etc.

Oregon. — The Bureau of Organization of Markets was established in 1914 under a law passed in 1913. General investigations relative to the marketing of agricultural products in Oregon are made.

Pennsylvania. — An Act passed in 1917 created a Bureau of Markets. \$25,000 was appropriated for the first two years' work.

South Carolina. — The State Department of Agriculture, Commerce and Industries, acting under its general authorization, has established a Bureau of Markets.

South Dakota. — A Director of Markets has been appointed under an Act passed in 1917. For the fiscal year ending 30 June 1919 an appropriation of \$12,500 was made.

Texas. — Marketing work is conducted by the Bureau of Markets under authority contained in the Warehouse and Marketing Law.

Vermont. — The State Department of Agriculture, in connection with the United States Bureau of Markets, provides funds for an investigator to conduct investigations and disseminate information relative to the problems connected with the marketing and distribution of dairy and other agricultural produce in the State. The work was begun in 1915 under authority of an act passed in 1908.

Virginia. — An Act passed in 1916 established a Division of Markets for Agricultural Products within the Department of Agriculture and Immigration.

Washington. — The Office of Farm Marketing was created by an Act passed in 1917, which appropriates \$15,000 for its support. Amongst other functions the Director assists in the formation of co-operative organizations.

West Virginia. — An Act passed in 1917 created a Bureau of Markets in the State Department of Agriculture. It conferred extensive powers on the Chief of this Bureau, authorizing him to make and enforce rules and regulations in regard to the classification, storage and marketing of agricultural products in the State, to encourage or to establish markets and to supervise transport. Much work has already been accomplished by this Bureau, especially in the grading, packing, sale and transport of fruit and vegetables. The Bureau is supported by commissions received for the sale of produce at the auction markets.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (1; heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 ore) (Denmark, Norway Sweden)	=	1s.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	4s. $\frac{5}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	1s.753/64d.	at par
1 Franc (100 centimes) (France)	=	933/64d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1193.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $\frac{83}{64}$ d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933/64d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64d.	at par
1 litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	933/64d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2s. 261/64d.	at par
1 Milreis, gold (Portugal)	=	4s. 519/64d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	933/64d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	3s.1117/64d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	18s.015/64d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	2s.1 $\frac{3}{8}$ d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	4s.1 $\frac{1}{32}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	2s.037/64d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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Part I: Co-operation and Association

BELGIUM.

THE "BOERENBOND": ITS WORK IN 1918 AND ITS NEW
AGRICULTURAL PROGRAMME.

SOURCES :

BOERENBOND BELGE OU LIGUE DES PAYSANS. EXERCICE 1918 Rapport présenté succinctement à l'Assemblée générale du 9 juin 1919 par le Chanoine Luytgaerens, S. Th. B., Secrétaire Général, Louvain, 1919.

LE PROGRAMME AGRICOLE DU CONSEIL SUPÉRIEUR DU BOERENBOND, In: *Le Paysan*, organ of the Boerenbond, Louvain, No 8, December 1919.

§ I. THE WORK CARRIED ON BY THE VARIOUS SECTIONS.

The *Boerenbond* is the most important organ of the agricultural co-operative movement in Belgium. It arose in 1890, when the propaganda work in favour of rural organization was beginning, and it was called upon to gather round itself the *boerengilden* or parochial corporations, whence branched off the various forms of co-operative societies — purchase and sale, rural banks, dairy and mutual insurance societies — which were adapted to improving the conditions of agriculture and of the rural population. The manifest of 1 August 1890 assigned a triple mission to the Boerenbond: (1) the defence of the peasants' religious, moral and material interests; (2) the improvement of agricultural legislation; (3) the co-operative organization of agriculture. It may be safely affirmed that the results obtained

fulfilled all the hopes entertained (1). During the war, in the midst of difficulties of every kind, there was no cessation of the work of giving energetic help to members, the agricultural class and the Belgian population in general. Lively relations were maintained with local associations, and an effort was made to strengthen and to extend proportionately to new needs the central departments which were very active.

The league is managed by a directing committee and a higher council and exercises its manifold activity through various sections. We will notice them briefly, basing our remarks on the report for 1918 presented by the general secretary to the meeting of 9 June 1919.

The Farmwives' League (Ligue des fermières). — This groups women living in the country. In 1918 six new farmwives' clubs were formed, their object being the formation of good mothers and good farmwives. They accomplish their work by means of small circulating libraries, lectures, lotteries, excursions to model farms, shows and the press. The League organized 111 lectures in 1918, to which must be added some twenty district meetings. There are more than a hundred affiliated clubs.

The Gardeners' General Federation (Fédération générale des horticulteurs). This federation was promoted by the Boerenbond with the object of improving by technical instruction, by the study of markets and by the organization of sales in common, the gardening industry which is much practised in the country around towns and especially in the surroundings of Malines, Louvain and Aerschot. In 1918 this federation took much interest in horticultural instruction and instituted a federation of gardening schools in which 13 schools were enrolled. The Gardeners' Federation also supplied its members with 27,616 kilogrammes of seed worth 312,059 francs, and sold 240 carloads of garden produce of the value of 593,000 francs.

The Purchase and Sales Office (Comptoir d'achat et de vente). — This office has the form of a joint-stock company and possesses stores at Louvain, stores and a mill at Antwerp and a branch at Hasselt. Its work, which was notable before the war, was somewhat restricted in 1918, in which year 16,000 tons of manures were supplied to members for 1,266,081 francs.

The Dairy Inspection Office (Inspection des laiteries). — In 1918 this office had enrolled 90 co-operative dairies, namely 33 in Brabant, 31 in Limburg and 25 in the province of Antwerp. From January to October 83 inspections were made and they showed that these dairies were in a very difficult position.

The Central Credit Bank (Caisse centrale de crédit). — This bank, constituted as a co-operative society, included 58 rural credit and savings-banks of the Raiffeisen type in 1918. It deals in rural land credit as well as in personal agricultural credit. It receives from local banks the money they cannot invest in loans to their members and with this capital it makes loans to the banks which have insufficient funds. It also inspects its affiliated banks. During 1918, 21 Raiffeisen banks joined the Central Bank of the

(1) See also the articles on the Boerenbond published in our issues for November 1913, May 1917, March 1918 and March 1919.

Boerenbond. The 580 federated banks are distributed as follows among provinces: Brabant 259, Limburg 120, Antwerp 103, West Flanders 47, East Flanders 42, Liège 7, Luxembourg 2. On 31 December 1918 the bank had a guarantee capital of 10,375,000 francs, represented by 10,375 members' shares, as against 826,000 francs in 1900, 4,488,000 francs in 1910 and 8,987,000 francs in 1915. Total incomings and outgoings in 1918 amounted to 582,798,605 francs, as against 49,766,292 francs in 1913, the last normal year.

In 1918 the Central Bank acted above all as a savings-bank: deposits underwent an extraordinary increase, rising at the end of the year to the immense sum of 212,000,000 francs, or thirteen times their sum in 1913 (16,110,371 francs). This large increase is partly explained by the high prices at which agricultural produce was sold during the war, partly by the decrease in the number of heads of live stock and by the lack of chemical manures and concentrated cattle-foods which caused farmers' working capital to lie idle. It should be added that the Boerenbond's Central Bank paid to its depositors throughout the war interest at the rate of 3 per cent. on sight deposits, on which other banking institutions paid 1½ and 1 per cent. Deposits belong to three categories (a) those of affiliated banks, (b) those of individuals; (c) term deposits (nominative). The two former need no further explanation. The last category was instituted in 1917 and modified in 1918: it serves persons who are not in immediate need of their funds and can therefore, by tying them up for from five to ten years, receive on them a higher rate of interest, fixed by the Bank at 3.60 and 4 per cent. The depositors or their heirs or assigns can however recover possession of their funds before such term expires: (a) if the person having the right to these funds die and his heirs wish to divide their heritage; (b) if it be desired to purchase real estate or build a house; (c) if parents on the occasion of the marriage of their children need money with which to enable them to set up house. In these cases the Bank repays the funds, retaining 2 per cent. Moreover if the depositor be obliged by special circumstances and for the needs of his farm to apply for the repayment of the sum deposited, he can obtain it on the same terms. He also has the option of transferring it wholly or partially to another person. Every half-year the interest falling due is entered as a 3 per cent. sight deposit in the depositor's name and in a special account. The fact that in eighteen months 40,413,963 francs were invested for terms of years clearly shows that this new departure meets a real need.

Given the superabundance of available funds, it will be understood that the credits opened in 1918 were very few, only 7 for 217,500 francs. At the end of the year the Bank's current credits numbered 469 and amounted to 5,269,000 francs, of which the local banks had utilized only 182,163 francs.

In 1904 the Central Bank also opened a Farmers' Land Credit Section. The loans of this section are granted by the local banks or the Central Bank, the latter dealing directly only with farmers living in a commune which has no local bank. The local banks obtain the capital necessary to this business from the Central Bank, which procures it by issuing land bonds within the limits of its mortgage credit. The bonds are secured by

mortgages and by the banks' liability, which is unlimited as regards their own loans, limited as regards those of the Central Bank.

The loans may not exceed two thirds of the value of property mortgaged and are granted for from 1 to 29 years. They are repayable by half-yearly or annual amortization payments, saving the borrower's right to make more rapid repayment.

In 1918 the Central Bank granted through the medium of the local banks 48 loans amounting to 331,800 francs, and granted directly 13 loans amounting to 76,500 francs: in all 61 loans for 408,300 francs. The largest sums were distributed in the provinces of Antwerp (132,500 francs) and Brabant (122,400 francs). The greater share of the mortgage loans was granted for the purchase of lands.

Since its foundation the land credit section had granted 1,279 loans amounting to 6,883,705 francs. Six hundred and sixty were totally repaid, 232 of them in 1918. Outstanding loans amounted on 31 December 1918 to 2,593,140 francs.

The Inspection Office (Service d'inspection). — This office inspects societies, gives legal and technical help and does propaganda work. In 1918 it accomplished its task in very difficult circumstances. On 31 December 1918, 293 agricultural gilds had been enrolled. Twenty-three adopted the complete rules drawn up by the Boerenbond's directing committee. These rules are in force in 108 gilds. Eleven societies were directly formed by the inspectors who also gave help to agricultural gilds not yet enrolled by the office. The office also has the duty of inspecting the gardening unions instituted by the Gardeners' General Federation already mentioned, and the purchasing sections which have developed within agricultural gilds. Of these sections 287 were enrolled in the office. Twenty-two adopted the model rules prepared by the office, already in force in 153 sections. Ten new purchasing sections were founded on the initiative of the Boerenbond's inspectors who gave their managers all necessary instructions as to book-keeping and the conduct of business. The office's propaganda work and the help it gave to savings and credit banks should also not be forgotten an enterprise which led to the formation of 20 new banks. The ordinary annual inspection of banks involved quite 453 visits, a proof of the truly marvellous activity of these banks during the war.

Insurance Section (Section des assurances). — The Boerenbond also comprises a section for insurance against fire, hail and mortality among live stock and for life insurance. We will deal with the work of this important section in that part of this review which is especially concerned with insurance.

§ 2. THE AGRICULTURAL PROGRAMME OF THE BOERENBOND'S HIGHER COUNCIL.

The Boerenbond's higher council, besides its normal administrative duties, is occupied during its sessions with various questions connected with agriculture, rural institutions and agricultural legislation. Among the matters

with which it deals we may mention the rural exodus, the farmwives' clubs, the women's movement, the savings and deposit banks in rural centres, etc.

Recently it drew up a vast agricultural programme of guardianship of the interests of the agricultural class. This programme, which was approved by the general meeting of 9 June 1919, may be resumed under the following heads: (a) respect for property and the defence of the agricultural class against all unjustified attacks; (b) trade representation and representation of particular interests — the agricultural class should occupy among the trade groups the place suited to its importance; (c) the increase of general education in the country and also of instruction in agriculture and horticulture; (d) the giving in every field of activity, of a preference to voluntary initiative as regards instruction, especially in agriculture and horticulture, as regards agricultural association, etc. — this voluntary initiative should be encouraged by the public authorities, who should not grant to official educational institutions or official associations any pecuniary or other advantage which is not also granted to voluntary institutions; (e) obtaining that the parliament and the government draw up laws and take effective measures in the interests of agriculture, and encourage agriculture, horticulture and stock raising as much as trade and industry, and the agricultural class as much as the industrial and the middle class; (f) obtaining that the State proceed to distribute taxes equally among all citizens and do all that is necessary for promoting a rapid and complete restoration of agriculture throughout the country and especially in the districts wasted by the war.

This programme was communicated to all the gilds belonging to the Boerenbond together with a circular in which the problems most urgently in need of solution and the most important points were noted. It asked in particular that the committees or other agencies entrusted with the official representation of Belgian agriculture might emanate from all the associations, public and private, and that the societies might be freely and liberally helped to obtain their staffs. The circular also called for legislative and administrative provisions for breaking up and improving the soil, and asked that State lands broken up for cultivation should become the property of farmers who would farm them for their own profit. The public authorities were further invited: (1) to second efforts for the improvement of live stock, to the end that scientific stock raising might increasingly satisfy the country's need for meat, eggs and butter; (2) to take effective measures against the adulteration of seed, fodder, manures, milk, butter and other agricultural produce; (3) to intensify the campaign against cattle-disease and the diseases of plants; (4) to provide the country districts with fit means of communication and transport, with a telephone service and with public lighting; (5) to supply electricity at moderate prices, as motive power and for lighting, to the rural population; (6) to give greater encouragement to small rural holdings; and to reform the law as to the letting of farms, agricultural credit, the accidents of labour, etc.

It is seen that the Boerenbond's higher council again showed, when it traced out the main lines of the agricultural programme to the fulfil-

ment of which it means to give all its support; that it had a precise knowledge of the greatest needs of agriculture and of the rural class in Belgium and was their most faithful and authoritative interpreter. It has come through the crisis of the war years without having lost any of its vitality, and therefore it is able to look forward confidently to the future.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

PROPOSED INDIAN AGRICULTURAL SOCIETY — *The Planter's Chronicle*, Vol. XIV, No. 52, Madras, 27 December 1919

In view of the proposed constitutional reforms in India under which, if carried out, each Province will control and finance its own Agricultural Department it has been suggested by the Government of India that provincial agricultural societies should be formed, with separate funds and organisation, and that there should be a Central Council, in touch with the Government of India. The Central Council would be composed of (a) a few nominated officials, (b) governors and members elected by the provincial societies in proportion to their membership, (c) life governors and members co-opted by the Council itself. The funds would be obtained by a small levy on the provincial societies and the Council would maintain a paid secretary. The federal organization thus formed would be known as the Indian Agricultural Society.

The functions of the Central Council would be to co-ordinate the activities of the provincial societies and to advise them, while the object of the provincial societies would be the general advancement of agriculture in their respective provinces.

CANADA.

1. CAUSES OF FAILURE IN CO-OPERATION. — *Agricultural Gazette of Canada*, Vol. 6, No. 10, Ottawa, October 1919.

In the *Agriculture Gazette of Canada* of October 1919 was published a series of short articles by different writers explaining the reasons why in the different provinces a certain number of agricultural co-operative associations had failed.

Nearly all the writers assigned as a principal reason the *lack of efficient management*. This applies specially to associations for the sale of produce. To be successful in marketing it is necessary to have had several years' experience and too frequently the sales manager of a co-operative association is chosen from amongst the members and has had no real experience. Efficient salesmen cannot be obtained for small salaries and co-operators must be prepared to pay a good man an adequate salary. Nor is a salesman who has been successful in a private business necessarily successful in managing a co-operative association, as it is a different kind of undertaking.

Another important cause of failure is the *want of loyalty* of the members. Cases are not infrequent where organizations have failed through the disloyalty of a single member. In one of the western states the members of a co-operative society obtained accurate estimates of the crop in which they were specializing, calculated the fair market value, and agreed to sell their total production at a specific price. One member was induced by outside interests to sell for a lower price, apart from his fellow-members. The result was unprofitable returns for their product and the disorganization of the co-operative society.

Closely associated with want of loyalty is the *opposition of those whose interests are affected*. Such persons take advantage of mistakes made by the co-operative society to arouse discontent amongst the members and induce them to withdraw their support.

Some societies fail through *lack of interest* on the part of the members. In some cases the need of organization was not pressing, as the members had previously been obtaining satisfactory returns for their produce. The most successful societies are usually those which were formed because of the great obstacles with which the members were confronted. Co-operation should b. born of necessity.

Loss of interest on the part of the members may result from various causes. It is apt to occur where the shares are of small value; a man's interest in a society is usually proportionate to his investment in it and societies which require their shareholders to invest \$50 or more secure better support and retain the interest of the members better than societies where the investment is smaller. Another cause of loss of interest is to be found in the fact that many associations carry on their business spasmodically; car-loads of goods are bought from time to time, but no regular stock is maintained. Organizations which maintain permanent stocks secure better support. The tendency apparent in some associations to leave the business management in the hands of a small group also results in loss of interest amongst the general body of the members.

Some societies have failed through *attempting to operate with too few members*. The business of such societies is too small to make it possible to buy or sell to advantage.

It is true that successful co-operative societies have sometimes started in a small way, but there are cases where it is better for a group of farmers in

a particular district to join with an organisation already formed rather than to attempt to conduct business on a small scale.

On the other hand, there have been instances of failure through *starting on too large a scale*, before experience had been gained or sufficient capital provided.

The downfall of some societies has been caused by *speculation*. There is a temptation to speculate as a co-operative society must show immediate results to succeed, the members rarely being willing to wait while the business is being built up before deriving benefit from it.

Anxiety to make a good showing at the beginning sometimes leads also to *operating on too small a margin*, which is a further cause of failure. Societies are tempted to cut prices of supplies considerably below the regular trade prices or, in selling produce, to give the members prices well above the current market price. This usually causes outside opposition and an attempt is made to break up the co-operative organization. Moreover, by working on too small a margin nothing is provided for emergencies. The safest plan is to follow current prices and to return the members a dividend on their sales or purchases out of the profits made, after setting something aside as a reserve fund.

Lack of education amongst the farmers is another reason assigned for the failure of co-operative societies. It has been noted in Ontario that it is less difficult to form a successful co-operative society in a district where there are several farmers who have been trained at the agricultural college than in districts where no such farmers are found.

In a few cases *local conditions* militate against the success of co-operation. There are districts where the people are naturally more suspicious of each other than in other districts.

2. GRAZING ASSOCIATIONS IN BRITISH COLUMBIA — MACKENZIE (Thoma), Commissioner of Grazing: Live-stock Associations and Range Management, in *The Agricultural Journal*, Vol 4, No 2. Victoria, April 1919.

The Government of British Columbia has assumed active control of the grazing of the public lands in the province and one of the proposed regulations governing the use of the crown ranges provides for the recognition of associations of stockmen formed for the purpose of bettering range conditions and improving the management of the stock.

The open range will be divided into "community allotments" grazed by groups of stockmen or into individual allotments. For cattle-grazing the community allotment will prevail, while for sheep-grazing the allotment of individual areas will usually be advisable. When a grazing area is allotted to a group of stockmen they must form themselves into an association which will lay down definite rules for the management of

the range. The rules will provide for the purchase and distribution of salt, for improving the grade of the stock, for the hire of herders, for the vaccination of the cattle, etc. The committee of the association will act as an advisory board to work in co-operation with the officers of the Government in the adjustment of all matters relating to the use of the public lands for grazing purposes.

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3. THE UNITED FARMERS' CO-OPERATIVE COMPANY (ONTARIO).—*The Farmers' Advocate*, Vol. LIV, No. 1422. London (Ontario), 25 December 1919.

The sales of the United Farmers' Co-operative Co., of Ontario, increased from \$33,000 in 1914 to \$226,000 in 1915; \$410,385 in 1916; \$918,197 in 1917; \$1,765,378 in 1918 and \$8,500,000 in 1919. The very great increase in the business during 1919 was mainly accounted for by the opening of a livestock department; in 8 ½ months the company handled over 3,000 carloads of livestock, which sold for \$6,467,957.

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4. THE SASKATCHEWAN CO-OPERATIVE ELEVATOR COMPANY — *Grain Growers' Guide*, Winnipeg, 3 December 1919.

Owing to the short wheat crop in the province, five of the Saskatchewan Co-operative Elevator Company's elevators were not opened for business during the year ending 31 July 1919. Others were only opened for a short time and in some cases financial loss was entailed. The number of elevators in operation was 307 and the total amount of grain handled was 21,830,815 bushels, being slightly less than in the previous year. The net profit was \$193 599.

No new elevators were constructed during the year. This was mainly owing to the increased cost of construction. The cost of building an elevator of the type used by the company had increased in four years from \$8,400 to over \$15,000. It was however, decided to increase the storage capacity of the terminal elevator by 2,000,000 bushels.

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5. THE UNITED FARMERS OF ALBERTA. — *Grain Growers' Guide*, Winnipeg, 28 January 1920.

At the 12th. annual convention of the United Farmers of Alberta, held at Calgary on 21, 22 and 23 January, it was reported that there had

been a considerable accession of membership in 1919. The aggregate membership of the local branches had increased from 18,335 at the end of 1918 to about 29,000 at the end of 1919.

Much attention had been given during the year to the organization of milk producers. Several associations of milk producers affiliated to the United Farmers of Alberta had been established and those formed at Calgary and Lethbridge had been able practically to fix the price of the milk sold by their members.

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6. THE UNITED FARMERS OF MANITOBA.—*Grain Growers' Guide*, Winnipeg, 14 January 1920.

At its seventeenth annual convention, held at Brandon on 7, 8 and 9 January, the Manitoba Grain Growers' Association decided to change its name to "The United Farmers of Manitoba", as many of the members are engaged chiefly in stock-farming, dairying or market gardening and it was desired that all classes of agriculturists in the province should become members. It was also decided, in the interests of the members who were dairy farmers, to form a milk-production committee. •

The number of affiliated local associations at the beginning of 1919 was 232 and 40 local associations became affiliated during the year. The aggregate membership of the affiliated associations at the end of 1919 was estimated at 9,654.

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7. THE FRASER VALLEY MILK PRODUCERS' ASSOCIATION.—*The Grain Growers' Guide*, Winnipeg, 22 October 1919.

A striking example of successful co-operation is afforded by the Fraser Valley Milk Producers' Association (British Columbia). The Association was incorporated in 1913, but it was not until 1917 that it was able to start work. In the spring of that year the milk companies of Vancouver City sent out notices that the price of milk from 1 June onwards would be lowered to 55 cents per pound of butter-fat contained in it. Meetings were held in all the principal centres throughout the Fraser Valley and the producers were asked to sign a contract to ship the milk for one year to their own association, being given the assurance that they would not be held to their contracts unless 75 per cent of the milk produced in the Valley was secured to the association. The required amount of milk was obtained and, armed with the contracts, the directors of the association interviewed the milk companies and instead of 55 cents they secured 65 cents per pound of butter fat.

This initial success quickly brought in new members. At first the members were asked to contract for one year and to take shares on the basis of the number of cans of milk supplied per day. Later they were asked to sign three year contracts and to take shares according to the amount of butter fat that they had shipped during the year. At \$50 per can the capital subscribed at the beginning amounted to \$ 140,000 ; it has since been increased to \$ 350,000.

Ten per cent. of the paid-up capital goes into what is called a " redemption fund," out of which at any time any member who is going out of the dairy business may receive the full value of his shares, plus six per cent. interest. This fund was started mainly in the interest of tenant farmers, who may at any time be obliged to give up their holdings, and it has been an important factor in securing their support.

The Association has obtained a predominant position in the milk-supply of Vancouver and will probably before long be supplying 90 per cent. of the milk distributed in the city. It has also built up a large business in condensed milk, ice cream, butter and cheese and has acquired several large plants for the manufacture of these products. In 1918 milk containing more than 2,000,000 pounds of butter-fat was handled by the association and the quantity was considerably increased in 1919. In 2 ½ years' work, the association is estimated to have procured for its 1,400 members about \$1,000,000 more than they would have obtained if it had not been in existence.

FRANCE.

1. THE NATIONAL FEDERATION OF AGRICULTURAL LABOURERS.— *La main d'œuvre agricole*, Paris, 25 January 1920.

The four existing federations of agricultural labourers have just decided to group themselves in a single organization which has taken the name of National Federation of Agricultural Labourers.

Its activity will, according to its rules, be entirely economic. It may not join any political organization nor take part in the meeting of such. Its headquarters are fixed at Paris.

"The object of the federation is to draw closer the links which give solidarity and to unite in a single block, in the union and the Federation, all agricultural labourers and specialists, without distinction of trade, sex or nationality, with a view to setting work free, and to emancipating it from all capitalist exploitation by socializing for the exclusive benefit of producers of, and contributors to, the national wealth, all means of production, that is realizing a social order in which each man will work according to his strength and consume according to his needs.

"Seconding the action of the unions, the Federation will work for the transformation of agricultural methods and customs in accordance with the

rules recognized as capable of re-establishing the balance between production and consumption.

" It will make a point of regulating working hours and increasing wages ; it will seek to obtain for those concerned a direct control of production, which will allow the means of reckoning the price of supplies to be established. It will make a point of bringing wages up to the level of the real value of work and of bringing about their unification.

" It will watch over the execution of the so-called labour laws, especially those concerned with health, safety, the accidents of labour, the weekly rest, working hours, etc.

" It will make a point of bringing the inspection of agricultural labour into being and of making it real and effective by causing the nomination of professional labourer inspectors, appointed by the unions and enjoying powers which will enable them to exact from farmers respect for the provisions for the protection of the health, life and dignity of workers.

" Whenever circumstances are favourable it will take action for the formation of a retirement fund for both sexes, without distinction of sex or nationality.

" The Federation will also make it its business to prove to its members by concrete facts that their complete enfranchisement does not reside in the improvement of wages for the wage-earners... are a kind of anachronism. It will prove that the obtaining of reforms and their application depend strictly on the consciousness, cohesion and will of the members, and that only the energy which these essential factors of power must provoke can put them into a position to win deliverance.

" In order that these results may be obtained the Federation has obligations, namely to bring about an understanding between all workers in all the industries of France, a duty implying its entrance into the *Confédération Générale du Travail* (General Federation of Labour), and an understanding between the proletariats of the whole world which constitute the *Internationale Syndical du Travail*."

We should notice that small owners, farmers and *métayers*, who work with the assistance of their families only, may be admitted to the unions which belong to the Federation.

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2. THE FEDERATION OF AGRICULTURAL SYNDICATES AND ASSOCIATIONS OF ALSACE AND LORRAINE. — *Annales de la mutualité et de la coopération agricoles*. Paris, January-February 1920.

This new federation proposes to defend the interests of agricultural syndicates and societies by the following means :

(1) Regular inspection of the book-keeping and management of affiliated syndicates by specially trained inspectors ;

- (2) Publication of reports in the *Journal agricole* ;
- (3) Lectures and defence of common interests ;
- (4) Information and advice as to economic and financial questions be given to affiliated societies and syndicates by competent persons ;
- (5) Measures favouring the credit of the various associations and ensuring the fulfilment of their tasks ;
- (6) Purchase in common of the requisites of agriculture and sale of agricultural produce by central societies formed for this object ;
- (7) Foundation of new agricultural societies or other associations which would serve the interests of agriculture.

Membership of the federation does not affect the liability of the member associations and syndicates.

In order better to safeguard the interests of its members, the federation has formed five special sections :

- (1) Section of the credit societies and their central bank, the Rural Bank at Strasbourg ;
- (2) Section of co-operative farming, selling and purchasing societies of all kinds ;
- (3) Section of agricultural committees and trade associations, whether local or district, and of producers' societies, seed societies, etc. ;
- (4) Section of breeders' syndicates ;
- (5) Section of agricultural insurance societies.

Each section office consists of members elected in the section's general meeting and sends a certain number of its members to the central committee as delegates. The central committee chooses one of its members as president of the federation, and decides in the last resort as to the admission of member societies and their classification in the various societies.

The first section (that of the credit societies and their central bank, the Rural Bank), the fourth section (that of the breeders' societies), and the fifth (that of the agricultural insurance societies) have already been definitely formed.

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3. GRANTS TO THE SYNDICATES FOR MECHANICAL CULTIVATION — Ministerial decree of 20 December 1919 and M. Tony BALLU'S remarks to the *Académie d'Agriculture de France* at the session of 11 February 1920.

Up to the 26th of last December the system on which grants were made to syndicates which had bought machines for mechanical cultivation was fixed by the laws of 2 January and 7 April 1917, the decree of 6 May 1917 and the decree of 16 July 1919.

From the point of view of the budget these grants were taken from three sources :

- (1) The grants of 33 per cent. made to all syndicates which bought

at least five machines were entered, under the head "Encouragement of Agriculture," on the regular budget of the Ministry of Agriculture;

(2) The grants of 50 per cent. received by the syndicates for mechanical cultivation which had bought more than five machines were entered on an "exceptional war expenditure" budget assigned to the Mechanical Cultivation Department. This department was dependent on the Ministry of Agriculture until 8 November 1919 but was attached by a decree of that date to the Ministry of the Liberated Districts. Another decree dated 12 November 1919, ruled however that until 31 December 1919 the payment and ordering of grants made under this head should be controlled by the Ministry of Agriculture.

A decree of 26 December 1919 repeals the rules made by the decree of the previous 16th of July. Its effects are, broadly;

(a) To reduce the rate of grants;

(b) To differentiate between the rates of grants according to whether French or foreign machines are in question.

The decree reduces to 10 per cent. the rate of the grants for foreign machines, and to 25 per cent. that of the grants for French machines.

In certain cases — in that of co-operative mechanical cultivation societies having at least twenty members — grants may go up to 15 per cent. for foreign and 35 per cent. for French machines.

The decree has force from the date of its publication, 26 December, except in the case of syndicates which send to the Ministry of Agriculture before 26 December all their papers, including the prefect's certificate of approval and the *visé* of the Director of Agricultural Services of the Department.

It was doubtless thought that a sufficient advertisement had been given to mechanical cultivation, and that farmers had moreover earned enough during the war to be able to pay more for a tractor.

According to M. Tony Ballu, however, since it is found that the average tractor, costing 20,000 francs, can every year plough and prepare about 100 hectares of corn land, then on all land brought under cultivation with the help of tractors the yield of corn due to such mechanical processes will be at least 1500 quintals per tractor used. The grant of 50 per cent. therefore cost the State 10,000 francs per tractor, but the difference between the price of foreign and that of French corn (about 25 francs) was saved; that is for 1500 quintals there was a saving of 37,500 francs. If the tractor is amortized in three years, and if the country is obliged to import corn for three more years, it follows that by making a grant of 10,000 francs in bank-notes the State will acquire the certainty, presuming its need for imported corn is not lessened, of saving by the tractor about 100,000 francs gold.

Another cause which seems to have contributed to the lowering of the rate of the grants is said to be the fact that some tractor-makers took advantage of the grants made by the French State to raise their prices by the amount of those grants. This fact is said to have been proved by a comparison between the prices obtaining in France and abroad.

NEW ZEALAND

THE PROGRESS OF AGRICULTURAL CO-OPERATION — *Pastoral Review*, Vol XXIX
No 5 Melbourne (Australia) 16 May 1919, *Commerce Reports* Nos 232 and 254, Wash-
ington (United States), 3 and 29 October 1919

Early in 1918 nine of the leading farmers' co-operative associations in New Zealand combined to form the New Zealand Farmers' Co-operative Wholesale Federation, Ltd., and later the number of federated associations was increased to eleven. The operations of these associations in 1918 are shown in the following table.

*Statistics for 1918 of Associations affiliated to the Farmers'
Co-operative Wholesale Federation.*

Association	Number of sharehold- ers	Autho- rized capital	Paid up capital	Volume of business done	Sales of merchandise	Earnings	Net profits
		£	£	£	£	£	£
New Zealand Farmers' Co-operative Association of Canterbury, Christchurch	8,416	1,200,000	536,910	4,028,609	734,779	185,570	75,886
Canterbury Farmers' Co-operative Association	3,800	325,000	223,377	1,579,274	646,557	106,184	27,503
Farmers' Co-operative Auctioneering Co., Hamilton	3,307	300,000	253,528	2,297,730	233,757	93,406	30,872
Southland Farmers' Co-operative Association, Gore	1,750	75,000	40,350	414,000	147,647	22,190	7,483
Otago Farmers' Co-operative Association of New Zealand Dunedin	765	100,000	56,390	918,000	143,318	30,315	6,837
Farmers' Co-operative Organisation Society of New Zealand Hawke	2,096	500,000	44,691	1,247,651	113,111	28,606	6,757
North Auckland Farmers' Co-operative, Whangarei	2,188	160,000	120,376	1,008,597	47,633	39,880	8,725
New Zealand Farmers' Co-operative Distributive Co., Wellington	2,200	250,000	66,325	546,234	90,013	32,481	9,882
Tokomaru Farmers' Co-operative Co., Tokomaru Bay	168	30,000	15,810	374,000	30,000	11,717	3,276
Gisborne Farmers' Co-operative Co., Gisborne	295	25,000	6,945	161,190	6,900	5,742	1,393
Hawke Bay Farmers' Co-operative Association, Napier	1,546	200,000	125,960	1,625,742	284,217	83,703	21,583
Total	26,531	3,215,000	1,490,662	13,858,131	2,488,532	699,794	200,197

The largest of the federated societies is the New Zealand Farmers' Co-operative Association, of Canterbury, but its business is not purely agricultural. It undertakes to supply its shareholders with domestic as well as farming requisites. An important part of its business is the handling and classification of seeds. Apart from some of the finer seeds, which are still imported, the main pasture seeds are grown by the farmer shareholders and sent to the stores, where they are put through dressing machinery before being placed on the market. The seeds are not sold on commission, as are many other commodities, but are purchased outright from the growers. It is the policy of the Association that the services of the seed department shall be given to the producers as nearly as possible at their actual cost, and during a period of 10 years the profits of the department have averaged less than 5 per cent.

Grain of all kinds is also dealt with practically at cost, but substantial profits are made on the supply of miscellaneous agricultural requisites. The Association has a large store near Christchurch in which artificial fertilizers are crushed and mixed. The fertilizers are made up under expert guidance to suit the various districts in which they are used. It is stated that previous to the development of co-operation in New Zealand the prices of the fertilizers supplied by private firms were excessive and the quality inferior.

The Association actively aids its members in the marketing of their livestock. It has agents who keep constantly in touch with the farmers and advise them as to the trend of the markets. It also employs a number of auctioneers and holds auction sales in different parts of its district. The farmer is paid the full value of the stock sold, less 2 $\frac{1}{2}$ per cent. commission, and the buyer is given terms on the purchase if he so desires.

During the shearing season, the farmers-shareholders consign all their wool to the Association. It is classed by experts and sold to the best advantage at periodical sales.

The Association maintains a land and estate department, through which farmers may dispose of their property. Clearance sales are also held for those who are retiring from farming or moving to another district. It is possible, too, for a member to deposit the title-deeds of his land with the Association and to borrow substantial amounts without giving a mortgage. The member simply states before the local registrar that he has borrowed a certain sum from the Association on deeds which it holds and the fact is noted on the local records.

Besides the formation of the Federation above-mentioned there were several other combinations between farmers' co-operative associations in 1918 and some associations took over old established private businesses. Thus the Farmers' Union Trading Co. of Auckland increased its share capital to £600,000 and acquired a large mail-order business, which brought to the company a list of 50,000 regular customers.

During 1918 the New Zealand Farmers' Fertilizer Co., of Auckland, was organized with a share capital of £500,000 and the erection was begun of a plant capable of producing 60,000 tons of high-grade fertilizer per an-

num. The farmers and stockowners who take shares in the company will be entitled to purchase all the fertilizers they require before any is sold to the outside public.

The numerous co-operative dairy societies have, in the main, been very successful, and the sale of fruit has been thoroughly organized on co-operative lines. A typical society for the sale of fruit is the Auckland Provincial Fruit-growers' Co-operative Society, which has 550 members, representing 100,000 bearing trees, and disposed in 1918 of about 120,000 boxes of apples from the orchards of its members. The apples are usually sold by auction.

A remarkable development of the co-operative movement is the formation of a Dominion Producers Shipping Co., with a capital of £5,000,000, which is subscribed by the producers in proportion to the sheep or cattle which they ship. It is realized that before satisfactory results can be obtained steps must be taken to provide shipping and so to guarantee a foreign outlet.

PORTUGAL.

THE AGRICULTURAL CO-OPERATIVE MOVEMENT. — Paper by Nuno DE GUSMÃO in *Annales de la mutualité et de la coopération agricoles*. Paris, November-December 1919.

The origin of agricultural credit in Portugal seems to go back to the *Misericórdias*, the charitable foundations which date from 1488. Their funds were constituted by gifts and legacies, and it was their object to supply the needs of philanthropic establishments — hospitals, maternity-homes, crèches, children's and old peoples' homes — and, as a secondary matter, to make loans to the peasants with their available funds. There are today more than 200 of these foundations.

Side by side with them there were in the sixteenth century the *Celleiros comuns* which were real credit banks for the farmers who gave their crops as security. Some of the *Celleiros*, like that of Lespa and Vigen, which still exists and is very prosperous, were transformed into ordinary banks.

Today the most perfect form of agricultural association in Portugal is the agricultural syndicate. In the whole country there are 209 syndicates which are active either in a single parish or throughout a district. Their earliest business was the purchase of requisites for their members and the sale in common of members' produce. The importance of these transactions and the profit which members' derive from the purchases in common is made evident by the following table, which shows some purchases of the Federation of the Syndicates of the Portuguese Midlands in 1918-19. This federation groups 30 syndicates.

The prices noted in the table are expressed in francs without regard to the exchange.

Taking into account the purchase of other less important articles,

Articles bought	Quantity in tons	Price per ton		Difference in two prices per ton	Total price		Difference in two total prices
		Trade price	Federation's price		Trade price	Federation's price	
		Francs	Francs	Francs	Francs	Francs	Francs
Fish manure	152	600	512	60	91 200	82,080	9,120
Fish meal	10	600	422	78	24,000	16,880	7,120
Sulphur	1,715	2,000	1,331	666	3,430,000	2,267,750	1,162,250
Oil-cakes	717	334	311	23	239,221	223,080	16,141
Sulphate of ammonia	37	3,00	1,666	1,834	129,500	51 642	77,858
Sulphate of copper	250	3 150	2,800	350	787,500	700,000	87,500
Superphosphate .	749	259	237	22	189,991	177,513	11,478
Nitrate of soda . .	368	1,500	663	837	552,000	243,981	308,019

the total sum invested in this business was 3,821,157 francs. The saving effected amounted to 1,676,411 francs.

The sale of members' produce was also most successful. In the case of wine, the difference between the trade price and that which the vinegrowers obtained by direct sale was for white wine 268,623 francs on 2,186,237 litres, and for red wine 379,092 francs on 4,212,136 litres.

Some syndicates own agricultural machinery which they hire to their members. The threshing machines of the agricultural syndicate of Serpa reduced the cost of threshing grain by from 3 to 8 or even 10 per cent. We should also notice the recent formation in Serpa of a mechanical cultivation co-operative society attached to the syndicate.

Certain syndicates sell live stock directly to the Lisbon municipal slaughter-house. At Evora, a pig-breeding centre, an agricultural co-operative society is being organized for the construction of a model slaughter-house with the outbuildings needed for the preparation of by-products.

Besides the Federation of the Syndicates of the Portuguese Midlands, of which we have spoken, there are two other federations which are also destined to develop largely.

Side by side with the agricultural syndicates there is the organized agricultural credit, for the benefit of which the government annually budgets a sum of 25,000,000 francs. The agricultural credit banks may make loans only to members of the agricultural syndicates. These banks receive deposits on which they pay interest at the rate of from 3 to 3 ½ per cent. The rate on the loans they make varies from 4 to 5 per cent. The repayment of these loans is secured by a surety or by a pledging of land, live stock, crops or machinery. Some banks can already live on their own resources and no longer need government advances.

In order to standardise wines the government has given large privileges to winemaking societies—exemption from taxation, construction of

buildings at the State's expense, payment of master vintners for five years, etc. Private initiative has not however responded sufficiently to the call made on it: the Portuguese vinegrower likes to make his own wine, which he always thinks better than his neighbour's.

REGENCY OF TUNIS.

I. MUTUAL, AGRICULTURAL, CREDIT IN 1918. — *Statistique générale de la Tunisie*, Tunis, 1919.

The year 1918 still, as regarded the rural banks of Tunisia, belonged to a period of stagnation. The number of banks, both French and native, remained stationary, and if the native banks kept all their members, the French banks lost three. We should add that the bills discounted were less in number and amount than in the previous year. Only a return to normal conditions can modify this state of affairs.

The two following tables show on the one hand the number of the banks and their membership, on the other the amount of the bills discounted in each year from 1912 to 1918.

French and Native Banks.

	French banks		Native banks	
	Number	Membership	Number	Membership
1912	20	524	1	168
1913	24	556	27	849
1914	24	565	41	1,483
1915	24	548	40	1,470
1916	24	536	40	1,464
1917	24	517	36	1,129
1918	24	514	36	1,429

Bills Discounted.

	Number	Amount (francs)
1912	1,853	2,102,909 10
1913	4,131	5,141,876 90
1914	4,119	4,728,235 29
1915	986	1,427,997 65
1916	81	186,916 35
1917	256	328,950.00
1918	107	270,840.50

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* *2. THE CENTRAL FARMERS' CO-OPERATIVE SOCIETY IN 1918. — *Statistique générale de la Tunisie, Tunis, 1919.*

The Central Co-operative Society shows, on the other hand, a revival of activity. Twenty members' shares of 50 francs each were subscribed in 1918 and brought the number of shares up to 1,574 and the society's capital up to 78,750 francs. The figure showing commercial operations rose particularly high, reaching 1,881,092.17 francs as against 847,599.15 francs in the previous year. The fact was doubtless due to the abundance of capital, for the rise coincided with a notable fall in the figure representing loans which was 1,733,442.45 francs in 1917 and 1,301,115.55 francs in 1918. The following table shows in detail the various business accomplished in the seven years for which the society has been active.

Business dealt with by the Co-operative Society.

Year	Commercial operations — Value of merchandise delivered	Loans 1914-1917						
		Loans for seed	Loans for labour	Loans for spring work	Loans for harvest	Loans for manure	Total amount of loans	Out-standing loans
	francs	francs	francs	francs	francs	francs	francs	francs
1912 . .	853,431.15	"	"	"	"	"	"	"
1913 . .	793,294.05	"	"	"	"	"	"	"
1914 . .	408,012.85	880,558.10	332,794.45	"	"	"	1,213,382.55	"
1915 . .	472,348.65	81,451.45	166,035.85	112,275.00	275,512.60	"	635,274.90	27,740.45
1916 . .	1,020,837.20	1,024,508.60	408,430.75	106,217.40	202,434.70	"	1,741,591.45	16,287.75
1917 . .	847,599.15	968,488.60	177,001.30	128,207.00	350,454.00	109,291.55	1,733,442.45	3,175.05
1918 . .	1,889,092.17	653,870.35	82,826.00	116,050.00	441,438.20	6,931.00	1,301,115.55	29,967.35
Total	6,284,615.22	3,608,877.10	1,167,088.35	462,749.40	1,269,839.50	116,222.55	6,624,806.90	77,120.60

UNITED STATES.

1. THE WORK OF THE OHIO STATE BUREAU OF MARKETING IN THE PROMOTION OF AGRICULTURAL CO-OPERATION. — Report of the State Bureau of Markets and Marketing as of July 1, 1919. Columbus (Ohio), 1919.

In the Report on the work of the Ohio State Bureau of Markets and Marketing from its establishment in 1917 to 1 July 1919, it is stated that the form of agricultural co-operative society most required in the State is

the co-operative elevator. Organizers from at least two national organizations were active in the State in 1918 and many promising societies were formed.

In March 1918 the Bureau assisted in the formation of a farmers' co-operative elevator company at Prout's Station, Erie County. The company had a very successful season and as a result seven other co-operative elevators were formed in the same county. In February 1919 another co-operative elevator company was organized, with the aid of the Bureau, in Champaign County.

Early in 1919 the Bureau was asked to assist in the organization of the cabbage growers in Erie County prior to the making of contracts with the kraut factories for the season. The principal cabbage-growing locality in the county was thoroughly organized and the growers succeeded in securing contracts at \$10 per ton instead of \$7 as originally offered. Other districts quickly fell into line and practically all cabbage growers in the northern part of the State secured contracts at \$10 per ton.

The grape growers in the northern part of the State also organized themselves on similar lines and were able to bargain collectively with the dealers and to secure better prices.

The Bureau of Marketing, acting in co-operation with several representative farmers' organizations in the State, drew up a co-operative marketing bill, which conformed closely to the law suggested by the Bureau of Markets of the United States Department of Agriculture. The bill passed the lower house of the State Legislature, but met with organized opposition in the Senate.

2 AGRICULTURAL CO-OPERATION IN NEW JERSEY — Third and Fourth Annual Reports of the New Jersey State Board of Agriculture Trenton (New Jersey), 1918 and 1919

The development of agricultural co-operation in New Jersey has been largely fostered by the State Bureau of Markets, which not only organises farmers' co-operative societies, but aids them in the sale of produce and the purchase of requisites. Thus towards the end of 1918 the Bureau interviewed the representatives of a large number of manufacturers and wholesale jobbers of fertilizers, feeding-stuffs, lime, spraying material, etc., and arranged the terms upon which they would supply the farmers' co-operative societies. The Bureau has also arranged for some associations a system whereby members' orders are placed in the hands of a bank which, when the supplies arrive, pays the draft, holding the signed orders as promissory notes. Each member pays cash as he takes his goods.

In the Report for 1918 of the Bureau of Markets a list is given of 21 independent farmers' co-operative societies besides 64 local branches of milk associations and 18 local poultry associations. Amongst these

may be mentioned the Sussex Country Fruit Growers' Association, which sold 5,000 barrels of apples in 1917 at an average price of \$4.50 per barrel; the Farmers' Co-operative Association of Mercer County which bought \$152,361 worth of farmers' supplies in 1917; the Mercer County Potato Growers' Association, which sold \$55,000 worth of potatoes in 1917; the Monmouth County Farmers' Exchange, which in 1917 sold \$1,782,833 worth of produce (mostly potatoes) and bought farm supplies to the value of \$580,597; the Monmouth County Shippers' Association, which sold \$60,000 worth of vegetables in 1917; the Burlington County Farmers' Exchange, which in 1917 sold produce to the value of \$257,000 and bought \$300,000 worth of supplies; the South Jersey Farmers' Exchange, which in 1917 sold produce (mostly potatoes) to the value of \$565,371 and bought supplies to the value of \$579,396, and the Vineland Shippers' Association which sold peaches in 1917 to the value of \$50,000.

Amongst the associations which have since been formed are the South Jersey Federation of Farmers, a federation of several successful buying and selling associations with a total membership of nearly five hundred; the Bergen-Passaic Farmers' Co-operative Association, which from its formation in December 1918 up to 1 July 1919 bought supplies to the value of \$25,000, and the Co-operative Growers' Association (of Beverly) which charts a special train daily for the shipment of the produce of its hundred members to New York.

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3. LIVE STOCK REGISTRY ASSOCIATIONS. — *Missouri Year Book of Agriculture*. Published by the State Board of Agriculture. Jefferson City (Missouri), 1919.

The Missouri Year Book of Agriculture of 1919 contains a complete roll, specially compiled by the State Board of Agriculture, of the live stock registry associations in the United States. For cattle there are 20 such associations; for pigs, 21; for sheep 27; for goats, 2; for horses and jacks, 21.

UNION OF SOUTH AFRICA.

FORMATION OF A MILK PRODUCERS' UNION. — *Farmer's Weekly*, Vol. XVIII, No. 451. Bloemfontein, 29 October 1919.

At a meeting of dairy farmers held at Johannesburg on 18 October 1919 it was decided to form a Milk Producers' Union for South Africa. Its objects will be to secure cleaner handling of milk on railways and speedier delivery to centres of distribution, to ensure that the producers shall receive a fair return for milk and otherwise to further and to protect their interests. The Union will be managed by a central committee consisting of the president and other officers and one representative from each branch.

Part II: Insurance and Thrift

ITALY.

COMPULSORY INSURANCE AGAINST UNEMPLOYMENT.

SOURCES :

DECRETO LUOGOTENENZIALE N. 1911, 17 NOVEMBRE 1918, CONCERNENTE PROVVEDIMENTI PER IL COLLOCAMENTO DELLA MANO D'OPERA NEL REGNO. *Gazzetta Ufficiale del Regno d'Italia*, No. 298, Rome, 19 December 1918.

REGIO DECRETO-LEGGE N. 2214, 19 OTTOBRE 1919, CHE DETTA NORME CIRCA L'ASSICURAZIONE OBBLIGATORIA CONTRO LA DISOCCUPAZIONE INVOLONTARIA. *Gazzetta Ufficiale del Regno d'Italia*, No. 291, Rome, 10 December 1919.

DECRETO MINISTERIALE 29 DICEMBRE 1919, CHE STABILISCE LE NORME PER IL VERSAMENTO DEI CONTRIBUTI PER L'ASSICURAZIONE OBBLIGATORIA CONTRO LA DISOCCUPAZIONE. *Gazzetta Ufficiale del Regno d'Italia*, No. 4, Rome, 7 January 1920.

CIRCOLARE DIRAMATA DALL'UFFICIO NAZIONALE PER IL COLLOCAMENTO E LA DISOCCUPAZIONE IN DATA 1° DICEMBRE 1919, CONTENENTE ISTRUZIONI PER L'APPLICAZIONE DELLE NORME TRANSITORIE CONCERNENTI I SUSSIDI DI DISOCCUPAZIONE, CONTEMPLATI NEL DECRETO-LEGGE 19 OTTOBRE 1919, N. 2214.

"IL MERCATO DEL LAVORO", organ of the Ufficio Nazionale per il Collocamento e la Disoccupazione, No. 1, Rome, 1 December 1919.

By a decree of 19 October 1919, No. 2214, the Italian labour placing department was reorganized and the system of compulsory insurance was substituted for that of grants providing for involuntary unemployment, which latter system did not give good results. On 29 December the Minister issued, with reference to this decree, rules for applying the aforesaid provisions. It is important to notice the chief heads of these new provisions since they affect the agricultural labourers for whose benefit compulsory insurance against the accidents of agriculture (1), invalidity and old age (2) was recently introduced. The decree grafts the insurance against unemployment on the labour placing agencies: it is therefore necessary first to notice the new organization of these latter.

(1) See the article in our issue for March 1919.

(2) See the article in our issue for November-December 1919.

§ I. THE NEW ORGANIZATION OF THE LABOUR PLACING DEPARTMENT.

The direction and the co-ordination of the department for placing labour and insuring against unemployment are entrusted in Italy to the National Labour-Placing and Unemployment Office (*Ufficio Nazionale per il Collocamento e la Disoccupazione*) in which are united the previously existing Central Labour-Placing Office and the temporary Unemployment Grants Office.

The local direction and superintendence of these services are exercised, under the National Office, by Provincial Labour-Placing and Unemployment Committees (*Giunte provinciali per il collocamento e la disoccupazione*) and by vigilance commissioners.

Each Provincial Committee is presided over by a magistrate and is composed of various elements, including three actual employers' representatives and two understudies for these and the same number of labourers' representatives and their understudies. The duties of a committee are (1) the superintendence of the working of local labour-placing offices and communal committees for the guidance of labourers in looking for work; (2) the co-ordination of the placing of labour so that a local surplus may compensate for a local deficit elsewhere; (3) the administration of the mixed provincial insurance institute and its sections for various trades and the inspection of the distribution of grants by this institute or by the trade funds in the province; (4) the preliminary authorization of the competent agencies to pay the unemployment grants, etc.

The local vigilance commissioners see to it that the provisions regulating the placing of labour and guarding against unemployment are exactly carried out. They prepare the procedure for the institution of labour placing agencies, and carry on the inspection and control of these agencies and of the unemployment institutions as they think necessary.

The placing of labour is still carried out by agencies constituted for this purpose, which have obtained the preliminary authorization of the Minister of Industry, Trade and Labour who, determines the sphere and the mode of their activity. The labour-placing offices may not only be constituted for communes and provinces, but also receive a mandate to act for several communes, for a *circondario* or for a district comprising several provinces. In the labour-placing offices and the committees for the guidance of labourers there must be deposited, in the care of the prefects, of the mayors or of the labourers' or employers' organizations, the tariffs agreed upon for a fixed labour market or for each industry or trade.

Employers who do not wish to engage the labour they need either directly or through their own agents are obliged to have recourse to the authorized labour-placing offices, stating the number of workers they require, their trades, and the conditions and wages offered.

It is forbidden absolutely that labour agents should act as such for profit, and the fines for contravention of this rule are determined,

The decree rules that a special pass-book must be given to each worker, and that the firm for which he works is responsible for the entry in this pass-book of his various successive engagements for employment and cessations to hold such. The worker must have such a pass-book, regularly kept, before he can be entered on the register of a labour-placing agency or recognized as unemployed.

Those cases are also determined in which special advances can be made to local bodies to enable them immediately to undertake public works of local interest, with a view to combating unemployment—works for which the law provides State co-operation and grants or privileged loans from the deposit and loan banks, and for which the requisite proceedings are in course. The sums advanced will be repaid by the communes after the grants or loans have actually been made.

Finally, there is provision for the constitution of co-operative trade groups among workmen whom the labour-placing agencies register as unemployed if it be not possible to find work for them rapidly. These groups may ask to be entered in the register of the co-operative societies of their province, and thus enjoy all the facilities granted by the laws in force.

§ 2. PROVISIONS FOR COMPULSORY INSURANCE AGAINST UNEMPLOYMENT.

In the National Office, already mentioned, a fund is constituted providing for involuntary unemployment. It is formed principally of a portion of the contributions to voluntary insurance against unemployment made by employers and employees, and of an annual payment of 40,000,000 liras which from 1920-21 onwards will figure, for such purpose, on the balance-sheet of the Ministry of Industry, Trade and Labour. This fund is administered by the Central Executive Labour-Placing and Unemployment Committee (*Giunta esecutiva centrale per il collocamento e la disoccupazione*), which committee (a) co-ordinates and superintends the working of the mixed and trade provincial unemployment institutions, of which we will speak presently; (b) comes to the aid of these institutions, by means of the fund already mentioned and in accordance with their ascertained needs and with special rules; (c) advances from this fund the sums necessary to the initial activity of these institutions; (d) proposes the attribution of grants and contributions to the unemployment institutions erected for workers not compelled to register with the provincial and trade institutions.

Workmen of both sexes are subject to the obligation to insure against involuntary unemployment due to lack of work, if they are working in dependence on others and are paid in fixed wages or by contract. Employees of private firms, other than workmen, who receive altogether no more than 350 liras a month, are subject to the same obligation.

Persons are exempt from this obligation if they are under fifteen or over sixty-five years of age, and so are persons working at home, domestic

servants, workers permanently employed by the State, the provinces and the communes, and voluntary workers.

Certain classes of workmen whose work does not readily lend itself to the inspection involved by the insurance and those who work for short periods at a time may be similarly exempted.

In every province compulsory mixed institutes insuring against unemployment are erected and are administered by the Provincial Labour-Placing and Unemployment Committee. The trade institutes, erected by trade organizations or by agreement between employers and workers, may also be authorized to practise this insurance.

Since the risk of unemployment is not subject to known mathematical laws, on the basis of which a determined coefficient can be placed in relation with the number of the insured, the decree fixes the contribution to be paid to compulsory insurance only provisionally and pending a new ruling. It is fixed as follows : for a day-labourer receiving up to 4 liras a day, a weekly contribution of 0.35 lira ; for day-labourer receiving from 4 to 8 liras, such contribution of 0.70 lira ; for one receiving more than 8 liras such contribution of 1.05 liras.

The contributions are chargeable half to the employer (manufacturer, merchant, landowner, tenant-farmer, *métayer*, contractor, etc.), and half to the employee ; but the employer is responsible for their payment which must take place no later than the day on which wages are paid.

The lessee of a holding is considered to be, together with its tenant by emphyteusis and usufructory, the employer of the persons outside his own family engaged to work on the farm. All of them are collectively responsible for the insurance contribution. The landowner, tenant by emphyteusis or usufructory, or the lessee if the farm is let, is considered as the employer together with the *métayer*, with whom he is collectively responsible for the payment of the insurance contribution for persons employed on the farm.

Co-operative societies are taken to be employers with respect to their members occupied on works which these societies undertake.

The employee's contribution may be deducted from his pay, the latter being taken to mean all he receives in compensation for his labour. It therefore comprises compensation received, in excess of wages or salary, in accordance with the hiring contract or agreement. It does not include any share of profits.

If payment consist wholly or partially of free board or lodging or other allowances in kind, the value of these allowances is determined at current market rates.

In the case of piece-work, the cost of tools and similar working costs born by the worker under the working agreements in force, must be deducted from the contract price in order to determine the pay of the workers.

Daily wages will be fixed by means of tables of average wages.

No contributions are due from unemployed workmen during the period of their involuntary unemployment owing to lack of work.

At the end of every financial year the Minister of Industry, Trade and

Labour may amend the rate of contributions in the case of institutions which have had incomings inadequate to paying the unemployment grants. Moreover, at the end of every three years contributions may, by a decree of this Minister, be graduated in accordance with the various classes of risks.

A part of the contributions paid will, as has been said, be assigned to the national fund which we have already noticed.

The institutes will make a daily unemployment grant in proportion to the contribution paid and fixed as follows: 1st class contribution, daily grant of 1.25 liras; 2nd class, 2.50 liras; 3rd class, 3.75 liras. In no case may the grant be more than half daily wages.

The grant is made from the eighth day of unemployment and for a maximum period of 120 days in the year. When the insured man has received it for 120 days he may not receive it again until six months have passed since the last day on which he received it.

Only involuntary unemployment due to lack of work gives right to the grant. Unemployment during the dead season, in the case of seasonal work, does not give such right, unless the workers concerned pay a special additional contribution at a rate to be fixed by each institution. Unemployment arising out of conflict between employer and employed does not give this right.

An unemployed workmen must present himself for registration by a labour-placing agency during the day following that on which he is dismissed, unless he intends to find work by himself, directly. In the latter case he renounces his right to a grant until the time when he presents himself for registration by a labour-placing agency.

An unemployed workmen has no right to the grant if in the two years preceding his unemployment he have not made on his own behalf at least 24 fortnightly, or an equivalent number of weekly or daily, contributions. He has the right to the grant up to the ninetieth day of his unemployment if in the two previous years he have made as many as 24 but less than 36 fortnightly contributions, and up to the 120th day if in those years he have made at least 36 fortnightly contributions.

An unemployed man who has, without just reason, refused adequate employment offered him in his own trade or a connected trade by the labour-placing agencies, loses his right to the grant. Employment must be taken to be adequate even if it be in another place than the unemployed man's home.

By a resolution of the competent agency all persons may be excluded, saving appeal to the provincial Labour Placing and Unemployment Committee, from right to the grant if they are shown to be idle or intemperate, or habitually to frequent places where alcoholic drink is sold.

The payment of the grants may also be rendered by the Provincial Labour Placing and Unemployment Committees, and for groups or classes of the unemployed, conditional on attendance at courses of elementary technical instruction.

The disputes arising out of the execution of the decree are to be

referred to the Provincial Labour-Placing and Unemployment Committees, and in the second instance to the Central Executive Committee.

* * *

It is to be anticipated that the number of employees who will from the first be subject to the obligation to insure will not be less than five million. Taking this figure as basis, taking it that for nine tenths of these insured persons contributions will be paid regularly (one tenth is taken as the fraction representing the permanently unemployed, exempt from obligation to pay contributions), and taking the average daily contribution as being that due from the second class of wage-earners, it may be assumed that the average daily receipts in the form of contributions from all Italy will be 540,000 liras, that is the monthly receipts will be more than 13,000,000 liras. Since the government's annual contribution is 40,000,000 liras, the insurance institution will have about 200,000,000 liras a year to provide against unemployment, a sum amply sufficient to make payments of unemployment grants to that tenth of the whole number of the insured which will be permanently unemployed, this allowance being ample for normal times and affording a sufficient guarantee even when the gravest labour crises occur (1).

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FINLAND.

1. MUTUAL, INSURANCE AGAINST FOREST FIRES. — Forsäkringsinspektörens Berättelse angående Forsäkringsväsendet i Finland År 1916 (*Report on the Position of Insurance in Finland in 1916*). Helsingfors, 1919.

According to the report recently published by the Inspector of Insurance, insurance against forest fires was practised in 1916 by a special department of the *Ömsesidiga försäkringsanstalten Sampos* (Sainpos Mutual Insurance Institute), and by the *Skogsegarens i Finland Ömsesidiga Skogsbrandförsäkringsförening* (Association of Mutual Insurance against Forest Fires among Owners of Woods in Finland) which began business in 1916. During 1916 the value insured was 181,219,500 Finnish marks; premiums paid amounted to 208,400 Finnish marks; and the compensation granted

(1) See G. C. NOARO: Questioni del lavoro. L'assicurazione contro la disoccupazione involontaria. Il progetto italiano. In *Rivista delle Società Commerciali*, Part VIII-IX, Rome, 31 August-30 September 1919.

amounted to 9,600 Finnish marks. Working costs amounted to 66,000 Finnish marks, namely 31,200 Finnish marks paid into various funds and 28,800 Finnish marks spent on salaries and other costs of management.

At the end of the year the guarantee funds amounted to 35,304 Finnish marks; the reserve fund to 150,960 Finnish marks.

2. A NEW FARMERS' INSURANCE COMPANY. — *Commerce Reports*, No. 7. Washington, U. S. A., 9 January 1920.

A new insurance company which will effect a large variety of insurance for farmers and farm labourers is being organized in Helsinfors. The name in Finnish is Maanviljelijain Vakuutusosakeyhtio and in Swedish Jordbrukarnas Försäkringsaktiebolag (Farmers' Insurance Company). The company will effect not only accident, old-age and life insurance for farm labourers, but also livestock insurance, forest fire insurance, and all kinds of insurance in connection with agriculture and industries auxiliary to agriculture, as well as the reinsurance of risks involved in such industries. The share capital amounts to 2,000,000 Finnish marks, composed of 10,000 shares of 200 marks each, but it can be increased to 6,000,000 marks.

REGENCY OF TUNIS.

1. MUTUAL AGRICULTURAL SOCIETIES INSURING AGAINST FIRE IN 1918. — *Statistique générale de la Tunisie*, Year 1918. Tunis, 1919.

Although the membership of the mutual societies insuring against fire remains very low, the year 1918 marks an appreciable progress since previous years. The insured value amounted to 40,871,907 francs, the highest previous corresponding figure, that of 1917, being only 23,231,069 francs. Receipts passed from 128,519.14 francs to 224,526.19 francs, and although the year was that most heavily burdened with losses the financial report shows

Working of the Mutual Agricultural Societies insuring against Fire from 1913 to 1918.

Year	Member-ship	Insured value	Paid sub-scrip-tions	Sub-sidies	Various receipts	Total receipts	Number of cases of loss	Com-pensation paid	Other costs	Total expendi-ture
		francs	francs	francs	francs	francs		francs	francs	francs
1913	364	7,416,737	55,421.68	4,487.40	8,661.51	68,570.69	9	18,020.60	4,899.37	22,928.97
1914	384	7,875,699	52,883.29	6,000—	9,262.05	68,145.34	6	26,003.66	6,044.85	32,048.51
1915	509	16,324,743	121,960.15	5,000—	20,132.46	147,992.61	6	41,351.32	9,047.06	50,398.38
1916	563	14,917,284	83,212.93	5,000—	19,665.03	107,877.96	17	35,953.10	7,268.91	43,223.01
1917	652	23,231,069	119,150.67	5,000—	4,368.37	128,519.04	16	62,837.53	7,519.07	70,356.60
1918	754	40,871,907	211,679.96	5,000—	7,840.83	224,526.19	10	125,575.49	13,917.86	139,493.35

that receipts exceeded expenditure by 85,032.84 francs. During the six years from 1913 to 1918 receipts amounted to 744,731.83 francs as against an expenditure of 358,448.82 francs, so that there was a credit balance of 386,283.01 francs. It may therefore be anticipated that with the return of the country to peace conditions there will be a new and considerable extension of proved societies.

2 MUTUAL, AGRICULTURAL, SOCIETIES INSURING AGAINST HAIL, FROM 1913 TO 1918. — *Statistique générale de la Tunisie*. Year 1918. Tunis, 1919.

The position of mutual insurance against hail was much less satisfactory. The year 1918 certainly saw the figure standing for insured value rise to 21,167,932 francs while the highest figure previously reached was 10,538,211 francs (1915). But the year was one of considerable expenditure, amounting to 278,665.60 francs as against an insignificant sum, 14,649.19 francs, in the previous year. Of the six years from 1913 to 1918 three — 1913, 1915 and 1918 — showed deficits, and the credit balance of the other three years unfortunately did not suffice to restore equilibrium. During the six years expenditure amounted to 767,535.08 francs, and receipts were only 522,089.19 francs, falling short by 245,445.89 francs.

Working of the Mutual Agricultural Societies insuring against Hail from 1913 to 1918.

Year	Member-ship	Insured value	Paid subscriptions	Subsidies	Various receipts	Total receipts	Number of cases of loss	Compensation paid	Other costs	Total expenditure
		francs	francs	francs	francs	francs	francs	francs	francs	francs
1913	124	3,236,370	26,634.84	7,000	90 03	33,721.87	11	47,001.16	11,181.96	58,783.12
1914	154	3,253,261	27,762.22	11,000	132 73	41,891.45	4	27,001.98	7,646.85	34,652.83
1915	254	10,538,211	79,289.57	15,000	75.39	94,364.96	61	1,706.14	36,230.31	360,036.79
1916	215	6,127,325	51,210.73	14,000	1,095.64	66,306.37	9	1,335.53	6,512.03	19,847.56
1917	243	8,672,916	71,171.35	14,000	1,724.12	87,195.77	5	7,451.98	7,097.20	14,649.18
1918	327	21,167,932	184,474.16	14,000	2,128.31	198,602.77	42	250,512.02	28,153.58	278,665.60

SPAIN.

REGULATIONS OF THE "MUTUALIDAD NACIONAL DEL SEGURO AGRO-PECUARIO". — *Gaceta de Madrid*, Year CCI, VIII, No 319. Madrid, 15 November 1919.

The Regulations of the *Mutualidad Nacional del Seguro Agro-Pecuario* the establishment of which we noted in our issue of November-December 1919, provide that the Council (*Consejo de Patronato*) shall determine annually the classes of mutual insurance which shall be effected. The various

risks directly insured by the *Mutualidad Nacional*, will be classified in the following order, according to the degree in which they are susceptible of being insured against on a sound basis : (1) Hail, (2) Mortality or uselessness of livestock caused by disease or accident, (3) Destruction of crops by fire, (4) Pests, (5) Frost, snow, floods, drought.

The risks of damage by hail being entirely unavoidable, the *Mutualidad* will insure against them to the full extent of the damage. The insurance contract will last for five years and will cover all the crops produced on the holdings insured. A provisional premium will be payable, which will be determined annually by the Council and will vary according to the nature of the crops and to local conditions.

If the amount of the compensation to be paid exceeds the available funds, no further premium will be levied. If, however, the compensation payable is less than the available funds, part of the provisional premium will be repaid.

The provisional premium will be the tariff rate determined annually for each case, plus 10 per cent. The additional percentage will form the Temporary Reserve Fund, which, if it has not been fully utilized during the term of the insurance, will be passed at the end of the term to the General Reserve Fund.

Four funds will be formed to provide for the payment of compensation. These will be :

(1) The Compensation Fund, formed by the premiums paid, after deduction of a percentage for expenses.

(2) The Temporary Reserve Fund, formed as stated above.

(3) The Accumulated Surpluses Fund, formed by the surplus in each year of the Compensation Fund. This fund will be held on behalf of the individual policy-holders, but the amounts credited to each will only be paid at the termination of his contract.

(4) The General Reserve Fund, formed by the surpluses of the Temporary Reserve Fund at the end of each five-year period, and by any other receipts of which the application has not been otherwise determined.

The compensation will be paid annually. If the Compensation Fund is not sufficient, recourse will be had to the other funds in the order in which they have been named. When the losses are so severe that all the available funds are insufficient to pay the compensation and the deficit is not covered by re-insurance, such part of the accumulated funds as the Council may determine will be divided amongst the policy-holders in proportion to the losses they have sustained.

All the insurances effected in any one year no matter what the crops insured or the locality in which they are situated, will form a single insurance group.

Special branches will be formed for live-stock insurance and insurance against the destruction of crops by fire. Losses will not be compensated in full, the policy-holder retaining in all cases a proportion of the risk.

Insurance against pests, frost, snow, floods and drought will be carried out by the *Mutualidad Nacional* through the medium of mutual in-

surance societies to be organized as may be determined by the Council. These societies will be based on fixed premiums proportionate to the aggregate value of the crops to be insured.

Provided that they are registered under the Law of 14 May 1908 and adjust their working in conformity with the system adopted by the *Mutualidad Nacional*, mutual insurance societies will be allowed to re-insure with the *Mutualidad* the whole or part of the risks they carry.

As soon as the funds at its disposal will permit, the Council of the *Mutualidad* will proceed to establish Re-insurance Societies for each class of risk with which it deals.

Part III: Credit

SWITZERLAND.

THE DEVELOPMENT OF MORTGAGE CREDIT FROM 1907 TO 1918.

OFFICIAL SOURCE:

DAS SCHWEIZERISCHE BANKWESEN IM JAHRE 1918 Bearbeitet im statistischen Bureau des schweizerischen Nationalbank. Berne, Stampfli and Co., 1920.

OTHER SOURCES:

WEBER-SCHÜRTER (J.): Die schweizerischen Hypothekenbanken. Zurich, Fussli, 1914.

STAMPFLI (Dr. A.): Die schweizerischen Kantonalbanken. Zurich, Fussli, 1914.

§ I. GENERAL REMARKS.

In Switzerland mortgage credit is afforded by the following groups of banks: Cantonal Banks (*Kantonalbanken*); Large Banks (*Grossbanken*); Local Banks (*Lokal- und Mittelbanken*); Savings and Loan Banks (*Spar- und Leihkassen*); Mortgage banks (*Hypothekenbanken*); Savings-banks (*Sparkassen*); Trust Banks (*Trustbanken*); Overseas Banks (*Überseebanken*).

Of these groups the last but one, that of the Trust Banks, has entirely ceased its mortgage credit business since 1914, having carried it on only in the three years from 1911 to 1913. It amounted to 19 million francs in the first, 39 million francs in the second and 49 million francs in the last year.

The group of the Overseas Banks afforded mortgage credit from 1914 onwards but only to a very limited and diminishing extent: its mortgage loans were reduced from about 56,000,000 francs in 1914 to 46,500,000 francs in 1918.

In the case of all the other groups the balance of mortgage credit grew constantly, except in that of the Savings and Loan Banks which reduced this part of their business by about 10,000,000 francs between 1907 and 1918. The mortgage credit business of the Cantonal and the

Mortgage Banks largely surpassed that of all the other groups, the mortgage loans of both these groups reaching fifteen hundred million francs.

In view of the importance of these two last groups and the fact that both do land credit business almost exclusively, we will examine their mortgage credit.

§ 2. THE MORTGAGE AND THE CANTONAL BANKS.

A. Mortgage Banks.

Until the middle of last century Swiss mortgage credit was afforded almost exclusively by the Savings Banks and by private capitalists.

With the second half of the nineteenth century there began for Switzerland a new period characterized by the development of industry and trade, the impulse given to railway and road making, and the foundation of higher schools and other institutions, especially for technical instruction. Banks began to be founded. The cantons founded the Cantonal Banks, which originated in the State and enjoyed State supervision, and the cantonal governments entrusted to these banks everything connected with land credit, laying particular stress on agricultural credit.

But the State impulsion and State help given to land credit did not confine themselves to the foundation of so-called mortgage sections in the Cantonal Banks or of independent State mortgage institutions. Several cantons acquired a direct interest in the fortunes of the private mortgage banks by buying no inconsiderable amount of their paper. But the process which led to the foundation of true mortgage banks was the passage from individual credit to credit organized on legal bases. The private capitalist, who had hitherto invested his money voluntarily and almost exclusively in mortgages, gave these up to some extent in order to invest it in State securities, railway, industrial and commercial bonds and shares, and bank bonds.

The landowner naturally suffered much from this change. The Savings-Banks and the few Cantonal Banks could not satisfy the whole demand.

This new state of affairs caused the institution of the true Mortgage Banks. Table (page 261) contains data as to the number, the total balance and the amount of the mortgages of the Mortgage Banks from 1907 to 1918.

B. Cantonal Banks.

The number of the Cantonal Banks varied between 1917 and 1918 from 22 to 24: it was 22 from 1907 to 1913, 23 from 1914 to 1916 and 24 in 1917 and 1918.

TABLE I. — *The Swiss Mortgage Banks 1907-1918.*

Year	Number of banks	Balance sheet total (thousands of francs)	Amount of mortgages (thousands of francs)
1907.	16	1,025,936	920,061
1908.	16	1,103,553	989,690
1909.	17	1,201,287	1,062,312
1910.	19	1,330,597	1,177,583
1911.	19	1,441,115	1,266,533
1912.	19	1,497,440	1,337,215
1913.	19	1,552,464	1,388,295
1914.	18	1,577,892	1,414,983
1915.	18	1,604,658	1,433,701
1916.	18	1,620,137	1,441,897
1917.	17	1,620,812	1,450,260
1918.	17	1,646,392	1,449,541

As we have already mentioned, the mortgage credit of these banks also developed notably, the total sum of the loans doubling between 1907 and 1918.

TABLE II. — *The Swiss Cantonal Banks, 1907-1918.*

Year	Number of banks	Balance sheet total (thousands of francs)	Amount of mortgages (thousands of francs)
1907	22	1,902,899	830,273
1908	22	1,978,885	891,977
1909	22	2,034,402	947,112
1910	22	2,127,404	1,022,420
1911	22	2,336,410	1,117,862
1912	22	2,660,132	1,218,110
1913	22	2,872,572	1,293,755
1914	23	2,921,598	1,373,912
1915	23	3,026,668	1,406,241
1916	23	2,223,301	1,446,029
1917	24	2,468,593	1,513,738
1918	24	3,665,150	1,558,481

A series of laws lays it down that the Cantonal Banks' mortgage loans form the most important part of their business, and their business of this kind does indeed represent the most important part of their activity.

The amount of the mortgages and the balance of the Swiss Cantonal Banks in the period stated were as shown in Table II (page 261)

§ 3. OTHER INSTITUTIONS.

The mortgage credit of the Local Banks (*Lokal- und Mittelbanken*), the Large Banks (*Grossbanken*) and the Savings-Banks (*Sparkassen*) has had a notable development. We have arranged in one table figures showing the total balance of these groups and the amount of their mortgages for the period from 1907 to 1918.

TABLE III. — *The Large Banks, Local Banks and Savings-Banks, 1907-1918.*

Year	Number			Balance sheet total (thousand of francs)			Amount of mortgages (thousands of francs)		
	Large Banks	Local Banks	Sav- ings Banks	Large Banks	Local Banks	Savings Banks	Large Banks	Local Banks	Savings Banks
1907	9	97	86	1,665,152	1,108,409	627,135	138,219	177,982	442,076
1908	9	99	86	1,722,419	1,164,405	650,851	149,575	184,320	454,951
1909	9	98	86	1,973,416	1,196,074	687,627	165,471	192,704	475,910
1910	9	99	86	2,108,324	1,302,511	730,103	180,086	199,976	497,240
1911	9	96	86	2,271,707	1,333,524	756,968	191,498	208,757	512,906
1912	7	89	81	2,428,533	1,262,967	764,786	194,518	206,162	520,382
1913	7	85	80	2,466,112	1,191,039	801,059	166,684	211,650	552,076
1914	7	87	87	2,369,385	1,156,740	812,215	163,520	216,776	553,012
1915	7	87	87	2,664,870	1,168,467	819,231	163,825	219,109	554,942
1916	7	86	87	3,025,238	1,252,556	842,667	162,907	225,301	555,860
1917	7	85	87	3,521,875	1,377,740	888,042	235,398	225,941	569,337
1918	7	85	87	3,980,246	1,566,378	963,471	225,989	245,614	603,718

§ 4. POSITION OF MORTGAGE CREDIT TAKEN AS A WHOLE.

It is important to know the total development of mortgage credit in Switzerland.

The mortgage loans made by the Swiss banks from 1913 to 1918 increased as follows, in terms of millions of francs.

1913	1914	1915	1916	1917	1918
3,863	3,968	4,017	4,071	4,227	4,324

Increase since previous year:

145	105	49	54	156	97
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Table IV gives data as to the development of Swiss mortgage credit from 1907 to 1918, and also, for purposes of comparison, the figures as to the balance sheet totals of all the credit institutions of Switzerland.

TABLE IV. — *Mortgages and Balance Sheet Totals of all Swiss Credit Institutions, 1907-1918.*

Year	Number of mortgages	Total balance (thousands of francs)	Amount of mortgages (thousands of francs)
1907	333	7,266,791	2,708,966
1908	340	7,639,393	2,891,482
1909	341	8,185,166	3,079,294
1910	339	8,759,975	3,305,110
1911	335	9,395,260	3,549,173
1912	314	9,931,247	3,717,647
1913	306	10,294,668	3,862,747
1914	319	10,326,713	3,967,822
1915	318	10,813,697	4,017,380
1916	318	11,567,372	4,071,013
1917	316	12,510,692	4,227,277
1918	315	13,533,757	4,323,937

The general stagnation of Swiss credit business in 1910 is to be attributed, in so far as rural mortgage credit is concerned to the abundance of money in circulation in rural districts, and is chiefly due, in so far as urban credit is concerned, to the slackening of building in the towns. Only industrial building fed mortgage credit to a small extent.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

AUSTRALIA.

LOANS TO PRODUCERS IN SOUTH AUSTRALIA. — Loans to Producers Act 1917 (South Australia). Loans to Producers Act Amendment Act, 1919 (South Australia). South Australia : Regulations under the Loans to Producers Act, 1917, issued 7 August 1919 and 30 October 1919. *South Australian Government Gazette*, No. 1, Adelaide, 1 January 1920.

Towards the end of 1917 an Act was passed by the Parliament of South Australia "to enable loans to be made by the Government for the encouragement of rural production and of effective land settlement." Under this Act a fund was constituted, to be known as "The Loans to Producers Fund," to which will be credited such moneys as may be provided from time to time by Parliament. The Act of 1917 laid down £10,000 as the maximum which might be voted by Parliament, but by an amending act passed in 1919 this sum was increased to £35,000.

Loans may be made out of the Fund either to co-operative societies or to individual landholders. The purposes for which loans may be granted to co-operative societies were thus specified in the Act of 1917 :

- (a) the erection of cool stores ;
- (b) the erection of factories for jam-making and canning, drying, or otherwise preserving fruit or vegetables ;
- (c) the erection of fruit-packing sheds ;
- (d) the erection or purchase of butter, cheese or bacon factories ;
- (e) the purchase of fruit-grading machinery ;
- (f) the erection of silos.

The Act authorized the Governor to prescribe other purposes for which loans might be granted, and he has prescribed as additional purposes for which loans may be granted to co-operative societies :

- (g) the erection or purchase of wineries or distilleries ;
- (h) the purchase of cool stores ;
- (i) the purchase of factories for jam-making and for canning, drying, or otherwise preserving fruit or vegetables ;
- (j) the purchase of fruit-packing sheds.

To individual landholders loans can only be granted for the purchase of fruit-grading machinery and the erection of silos. The Governor has not prescribed any additional purpose.

Applications for loans are made to the Minister of Agriculture, who refers them to a Loans to Producers Board appointed by him. The Minister may, on the recommendation of the Board, make such loans as he considers desirable.

For all purposes except the purchase of fruit-grading machinery loans will be made for a period of twenty years. For the first two years of the currency of the loan interest only will be payable, the payments being made half-yearly. After this the repayment of the principal, together with interest, will be made in 36 half-yearly instalments, the first instalment falling due on the first day of the 31st month from the making of the loan.

Loans for the purchase of fruit-grading machinery will be made for a period of seven years. The principal will be repaid in 14 half-yearly instalments, and interest will be payable on the loan or the balance still unpaid on the same days on which instalments of the principal are payable.

Every loan to a co-operative society must be secured by a first mortgage over the society's estate or interest in any land or building. If the loan is for the purchase of fruit-grading machinery, the Minister may also require the Society to grant him a bill of sale over such goods and chattels as he thinks fit. Loans to landholders must also be secured by a first mortgage.

The rate of interest payable on loans is fixed from time to time by the State Treasurer, notice being published in the *Government Gazette*. In the *Gazette* of 1 January 1920 a notice appeared that the rate had been fixed at 6 per cent. per annum. When, however, any half-yearly payment is made within 14 days next after the day upon which it becomes due, a rebate of interest at the rate of $\frac{1}{2}$ per cent. is allowed.

EGYPT.

THE MORTGAGE CREDIT BUSINESS OF THE LAND BANK OF EGYPT IN 1918-1919.

— *Rapports du Conseil d'administration et des censeurs*. Alexandria, 1919.

Egypt held a privileged position during the war: an agricultural country, it is affected less than others by the industrial crises which have followed on the world-wide upheaval for the products of her soil have reached un-hoped-for prices which will doubtless remain high for a considerable period. A large part of the private debt has been repaid. The considerable available funds left in the hands of the cultivators allow them to make new purchases. The improvement of lands hitherto unproductive, in accordance with a programme of large works undertaken or planned by the government, will further encourage the country's economic development.

The Land Bank of Egypt has closely followed the general movement of business. Its receipts in cash have been very large and a resumption has taken place of its activity as mortgagee.

From the time of its foundation until the close of the year 1918-19, the Land Bank concluded 2,839 amortizable loans and 345 amortizable sales

of real estate for a total sum of 235,435,949.68 francs, including 146 loans and 61 sales passed in 1918-19 for a capital sum of 12,438,023.90 francs.

Anticipated repayments amounted to 92,691,796.68 francs, including 7,227,714.27 francs for 1918-19.

The part of the annual payments representing the capital received which constitutes amortization is 53,271,724.49 francs, including 4,176,076.63 francs for 1918-19.

The balance of amortizable loans and sales on 30 September 1919 was 89,471,528.51 francs.

The total amount of current mortgage loans on 30 September 1919 was 91,288,874.69 francs, and since a sum of 3,540,163.31 francs was still due from various debtors on the amounts of the auction prices of expropriated real estate, the total mortgage business amounted to 94,829,037.90 francs. More than 97 per cent. of the current loans was secured by rural real estate.

FRENCH COLONIES

INTRODUCTION OF THE AGRICULTURAL PLEDGE INTO COCHIN CHINA. — *Ministère de l'Agriculture : Bulletin mensuel de l'Office de renseignements agricoles*. January-April 1919.

On 28 November 1918 the Governor General of Indo-China issued a decree which introduced the agricultural pledge into Cochin China.

Its aims is to allow the native agricultural unions to grant to their members loans secured by goods pledged by private deed, such loans being privileged in the matter of registration.

Since in certain points this decree is contrary to the provisions of the decree of 16 April 1916, approved by the decree of 5 January 1917, as to the registration of deeds concerned with native business, the new decree has been approved by a decree issued by the President of the Republic on the report of the Minister of the Colonies.

UNITED STATES.

LOANS MADE UNDER THE FEDERAL FARM LOAN SYSTEM. — NORMAN (James B.): Co-operative Credit Institutions in the United States, in *Annals of the American Academy of Political and Social Science*, Vol. LXXXVII, No. 176. Philadelphia, January 1920.

In our issue of August-September-October 1919 we gave an account of the working of the Federal Farm Loan System. We now give a table showing for each State the number of National Farm Loan Associations chartered up to 30 September 1919, together with the number and total amount of loans made since the organization of the system. The districts into which the States are grouped are those of the twelve Federal Land Banks which have been organized.

*Loans made under the Federal Farm Loan System from the Organization
of the System to 30 September 1919.*

District and State	Number of national farm loan associations chartered	Number of loans made	Total amount loaned
District No. 1:			
Maine	16	511	\$1,062,550
New Hampshire	6	147	312,900
Vermont . . .	11	306	785,500
Massachusetts .	17	591	1,488,605
Rhode Island .	2	50	118,400
Connecticut . .	15	390	1,201,600
New York . . .	42	1,351	4,142,740
New Jersey . .	17	240	801,250
District No. 2:			
Pennsylvania .	45	864	2,262,900
Virginia	75	2,392	6,341,850
West Virginia .	24	627	1,137,650
Maryland . . .	14	204	634,700
Delaware . . .	1	12	24,500
District No. 3:			
North Carolina,	128	2,610	4,635,550
South Carolina,	100	1,631	4,387,090
Georgia	65	945	2,454,285
Florida	68	1,371	2,414,120
District No. 4:			
Tennessee .	112	1,966	4,881,500
Kentucky	81	1,378	3,458,700
Indiana .	90	2,361	7,913,300
Ohio . .	35	527	1,706,400
District No. 5:			
Alabama, . .	107	3,413	5,752,445
Louisiana . .	68	2,589	4,180,490
Mississippi, .	141	6,493	8,259,570
District No. 6:			
Illinois .	112	1,711	6,622,835
Missouri, .	134	2,609	7,006,900
Arkansas	137	4,757	7,266,205
District No. 7:			
North Dakota	169	5,119	15,339,300
Minnesota . . .	144	3,117	9,318,200
Wisconsin . . .	86	1,797	4,093,400
Michigan . . .	117	2,699	4,855,000

Loans made under the Federal Farm Loan System from the Organization of the System to 30 September 1919 (Continued).

District and State	Number of national farm loan associations chartered	Number of loans made	Total amount loaned
District No.			
Iowa	134	2,475	\$17,110,250
Nebraska	125	2,514	10,506,990
South Dakota . .	79	1,615	6,500,950
Wyoming	22	443	972,100
District No. 9 :			
Kansas	129	3,082	10,771,500
Oklahoma	119	2,587	5,099,100
Colorado	130	2,395	4,591,000
New Mexico . . .	81	1,869	2,850,200
District No. 10 :			
Texas	320	10,212	28,666,561
District No. 11 :			
California	113	2,869	9,315,500
Utah	59	1,407	3,973,800
Nevada	3	38	172,600
Arizona	9	232	603,500
District No. 12 :			
Idaho	75	2,412	6,789,295
Montana	132	4,058	9,949,640
Oregon	91	3,018	8,715,180
Washington	153	4,108	9,426,745
Total	3,953	100,112	\$261,175,346

On 30 September 1919 the aggregate capital of the Federal Land Banks was \$21,387,689 of which \$13,032,860 was held by the national farm loan associations.

UNION OF SOUTH AFRICA.

ADVANCES TO SETTLERS IN THE TRANSVAAL. — *Union of South Africa Government Gazette*, No. 997, Pretoria, 15 September 1919.

The terms and conditions under which advances may be made by the Minister of Lands to lessees under the Crown Lands Disposal Ordinance, No. 57 of 1903 (Transvaal) were published in the *Union Government Gazette*

of 15 September 1919. Such advances may be made for the erection or construction of improvements of a permanent or substantial nature on a holding, or for providing a lessee with stock, implements, seeds and other things necessary to enable him to develop and work his holding beneficially.

Applications are made to the Department of Lands, which refers them to the Land Board appointed in terms of the Ordinance. No advance is made except on the recommendation of the Land Board and the total amount of advances made to a lessee cannot exceed £250.

Interest is payable half-yearly at the rate of 5 per cent per annum and if any sum payable by a lessee be not paid within one month from the date on which it falls due, interest at the rate of $4\frac{1}{2}$ per cent. will be charged thereon from the date on which it became due to the date on which the payment is actually made.

If the borrower's lease under the Ordinance is ceded, terminated or cancelled, the principal remaining unpaid, together with interest due thereon, becomes forthwith due and payable. In the event of the money advanced not being spent by the lessee for the purposes for which it was advanced, or if the lessee otherwise fails to comply with the conditions on which the advance was made, the Minister of Lands may declare the advance, as well as any advance previously made, and interest thereon to be forthwith due and payable and may also cancel the lease of the holding.

The lessee must insure against loss by fire such building on his holding as the Minister may direct and must keep in repair any improvements on the holding.

Unless the Land Board otherwise direct, the right of property in all livestock, implements and other material advanced will be vested in the Minister of Lands until the whole of the advance, with interest, has been repaid.

Apart from making advances to the lessee, the Minister may, on receipt of an application from the lessee and subject to the recommendation of the Land Board, cause boring operations to be effected or improvements of a permanent nature to be constructed and the cost thereof may be added to the purchase price of the holding and the rent or instalments of purchase price payable by the lessee in respect of the holding may be increased accordingly.

Part IV: Agricultural Economy in General

AUSTRIA.

THE ABSORPTION OF PEASANT HOLDINGS AND LEGISLATIVE EFFORTS TO COUNTERACT IT

by HERMANN KALLBRUNNER, Agricultural Engineer.

Since 1860 changes in the tenure of land, variously caused and very deplorable from the economic point of view, have occurred in certain parts of Austria and especially in the eastern districts. The number of the independent peasant landowners has decreased while that of the large landowners has increased as has the size of their holdings.

Generally the large Austrian properties, particularly in the territories of the Sudeten and the Carpathians which have today passed respectively to the Republic of Czechoslovakia and to Poland, were models as regarded the intensive use of their soil, their improved system of farming, and the scientific utilization of their products which were subjected on the spot to industrial processes. But on the large properties which have recently sprung up in the mountainous countries agriculture was and is mainly extensive. Fields and meadows are mostly turned into forests; mountain pasturelands are abandoned to wild vegetation; buildings not needed by the keepers are left to fall into ruins.

The peasants' holdings have almost always been acquired by town dwellers, who have generally wished to procure for themselves a larger or smaller property for purposes of sport or as a summer residence. More rarely, especially when they have been acquired by religious corporations, these holdings have constituted a safe if little remunerative investment for capital. Only exceptionally has there been an idea of acquiring them as a speculation, in view of their value for growing timber. The motives which have determined the purchase have also determined the utilization of the soil. Generally agriculture has been superseded by extensive forestry, and stock-raising, which had some importance, by game preserving. Only the best and best situated pieces of land have been reserved for farming on a small scale, which generally has not supplied the needs of the new own-

ers or the need for food of the game they preserve. It has therefore come about that very many landowners have bought hay, horse-chestnuts and similar stores and transported them to the mountains. In a few exceptional cases the new landowners have tried to keep up a certain agricultural production. In these cases, however, thorough methods of farming, which aim systematically at production, have not been followed, the guidance being rather that of caprice and being above all incompetent. There have been farms in which every fashionable novelty and every idea formulated have been introduced. The method of keeping stock permanently at grass has succeeded that of keeping it stalled; grey cattle have been replaced by red and white cattle; first pigs, then horses or sheep have been kept, in a varying series, generally by an ever changing staff who have been strange to the country and have been dismissed before they have had the chance of adapting themselves to the local economic conditions. The farms have always been run at a loss, generally for several years. When the owners have become convinced that they would never, never draw a profit from them, they have ended by abandoning agriculture even on the areas hitherto used for it and by afforesting these also.

The transformation of many peasants' holdings into sporting properties resulted in a thinning of the population, for not only the peasants, their families and those they employed emigrated to the valleys and plains and the towns, but also the craftsmen and tradesmen of the mountains. In the time of the greatest absorption of peasant holdings into large properties, the so-called *Bauernlegung*, many small iron-works were also ruined. They were to be found in all the valleys, obtaining power from the mountain falls and using charcoal, the latter being an important and lucrative source of gain for the peasants. When the large scientifically run ironworks, founded on a large scale and brilliantly organized, robbed the small enterprises of their life-force, these latter, which had been active for centuries, and their workmen, had to forsake their home, and thus depopulation increased, and a yet larger emigration of peasants ensued since the market hitherto open for charcoal was lost. This is an interesting example of the connection between industry and agriculture which is often so close.

Side by side with the decrease in the population there was a decrease in the number of heads of live stock, in the whole agricultural production and in the country's tax-paying capacity. The lack of uniform statistics, and the circumstance that the changes named were influenced in a contrary sense by other factors, make it impossible to illustrate this statement with figures. Such illustration would be possible only after a very detailed explanation which would take all accompanying circumstances exactly into account, and for this we have no space. But we have many single statements to draw upon, and we can thence directly or indirectly deduce the loss which the absorption of peasant holdings implies. Wettschieber, in his work "*Die Bauernlegung in Steiermark*," published in Gratz in 1916, proves that in Upper Styria, from 1903 to 1913, there were sold to persons other than peasants 585 farms, previously owned by peasants only, having a total area of 23,356 hectares and being of the value of 17,500,000 crowns.

Nearly half the land thus conveyed served to form or enlarge sporting properties. In the judicial districts of Liezen and Rottenmann, which have an area of 80,600 hectares, there were sold to sporting owners during the last forty years, according to Uitz ("Der Rückgang des bürgerlichen Besitzungs" in "Zeitschrift für Volkswirtschaft", Vienna, 1915) 300 peasants' holdings having a total area of 17,000 hectares. The area sold is equal in the district of Liezen to half and in that of Rottenmann to two thirds of the present property of peasants. Dr. Gürtler, in his "Verlorenes Bauerland," published in Graz in 1917, makes similar observations.

In Lower Austria, according to enquiries made by the Provincial Council of Lower Austria, 4,306 peasants' holdings were sold voluntarily and 1,361 compulsorily from 1883 to 1893, most of them going to form sporting properties. According to Panz, 216 peasants' holdings, extending in round figures over 16,000 hectares, were absorbed into large properties between 1883 and 1905 in the three judicial districts of Aspang, Gutenstein and Ganing. In 396 cases of sales noted in the report of the Provincial Committee of Lower Austria, the former owners had become day or permanent labourers; in 647 cases they had entered other trades; in 517 they had taken other farms; in 191 they had retired on pensions; in 54 they had been admitted into paupers' asylums; in 444 they were dead.

Enquiries in other provinces yielded similar results. Most of the former owners were gaining a living in towns and in industry—very few of them in the country—often a precarious living in conditions new to them. Yet the force they represented was not lost to the country. But the reduction in the country's flocks and herds had an unmitigated importance. If the results of the census of live stock made on 31 December in the last ten years be compared, we find a diminution in the number of cattle and sheep or, rarely, an insignificant increase. This is particularly striking for the years from 1900 to 1910, in which the number of cattle and sheep decreased all over the mountainous country except in Lower Austria where it increased by 0.4 per cent. (2,571 head).

According to the census of live stock of 31 December 1910 ("Die Ergebnisse der Viehzählung vom 31 Dezember 1910"), published by the Central Statistical Commission, the herds of the several provinces were as follows:

	1880	1890	1900	1910
Lower Austria	564,167	554,153	606,938	609,509
Upper Austria	555,155	553,074	588,569	552,877
Salzburg	149,581	143,484	141,549	128,618
Styria	663,173	700,012	718,841	683,443
Carinthia	258,255	247,557	256,220	222,383
Tyrol	420,169	402,989	423,405	412,667
Vorarlberg	61,115	58,231	62,635	58,592

The flocks were as follows :

	1880	1890	1900	1910
Lower Austria.	178,541	115,552	661,490	44,619
Upper Austria.	80,139	63,310	47,674	32,204
Salzburg	58,290	51,860	45,063	35,991
Styria	188,273	162,416	123,245	86,708
Carinthia	167,809	132,709	118,563	71,316
Tyrol	246,426	307,329	176,594	150,903
Vorarlberg	12,312	10,204	7,999	4,686

When these figures are examined it should of course be remembered that other circumstances, as well as the reduction of farmed area due to the absorption of peasant holdings, have determined the diminution in the number of cattle, which has in many cases been itself the cause of a deterioration in the economic condition of the peasants in the country. A farm which derives its chief profit from the sale of live stock and their products must obviously decline in prosperity when the number of the animals it maintains no longer allows of any sales, the whole increase being absorbed by the owner's own consumption.

It is interesting to compare the flocks and herds of 1900 with those of 1910 in the districts in which the absorption of peasant holdings by large properties was notoriously on the greatest scale. Such a comparison makes very clear the mutual connection of the flocks and herds and of the absorption of peasant holdings. In the political district of Lilienfeld in Lower Austria the number of cattle fell by 1,373 from 13,894, that of sheep by 1,370 from 2,783 ; in the judicial district of Glaggnitz the number of cattle, 6,279, fell by 350, that of sheep, 934, by 447 ; in the political district of Pöggstall 14,446 cattle fell by 1,078 and 2,880 sheep by 900 ; in the political district of Scheibbs 20,185 cattle by 1,263 and 5,738 sheep by 2,232 ; and in the judicial district of Gutenstein 4,401 cattle by 732 and 618 sheep by 248.

It can easily be understood that the diminution of the farmed area and of the flocks and herds, and the small number of peasants cultivating the soil, on the one hand, and the increased number of consumers in the towns on the other hand, did not a little to aggravate the situation in Austria-Hungary during the war with regard to the food-supply, and especially such situation in Austria, which is now made up almost exclusively of the mountainous countries which suffered most from the absorption of peasants' holdings.

The lessened tax-paying capacity of the districts in which this absorption of small agricultural holdings took place is in general hard to estimate, although the land-tax is considerably lower for recently afforested woods than for fields and woods. The transformation has generally taken place little by little, and always much more slowly than the growth of the

fiscal burden which has increased rapidly in consequence of the increased needs and the lessened value of money. The effect of the decline of small agricultural holdings has, on the other hand, been much felt in the taxation of single communes. The communes supply their own need of money by an additional tax added to the government tax, and since communal expenditure is not reduced by a reduction of population — roads and schools have to be maintained in the same way, whether the peasants number 20 or 60 — the additional taxes have to be doubled or even quadrupled while the government tax is appreciably falling owing to the transformation of fields into woods and the demolition of dwelling-houses. This explains why the remaining peasants are subject to such heavy communal taxation, although they also pay considerable taxes to the State. Thus the remaining peasants are under another economic disadvantage. Their financial position is again weakened and their economic independence threatened.

Before the war the necessity of taking energetic and precisely directed action with regard to this injurious absorption of peasant holdings, of discovering its causes and arresting its effects (1), was overlooked, although at the beginning it would have been easy to repair the damage already done and to prevent it from spreading.

As it is easy to mend a small hole in the roof of a house and thus prevent large damages, so it is a simple matter to repair economic losses as soon as they make themselves evident. But as it is difficult to restore a house which is in a thoroughly bad state of repair, so it is hard to re-establish in their old conditions a class of peasant landowners whose existence is gravely compromised.

Only during the war was an energetic effort made to arrest the exodus of peasants from the land and to prevent the transition from intensive to extensive cultivation, but the true causes of the absorption of peasant holdings were not touched nor the evil attacked at its roots.

The law as to the sale of lands, the *Grundverkehrsverordnung*, of 9 August 1915, published in No. 234 of the "Reichsgesetzblatt," had in very many cases an extremely beneficent effect. It prevented the speculative purchase of peasants' land by persons wishing to acquire sporting properties, by traders and by persons enriched by the war, and it preserved to peasant farming much land which otherwise would have been irretrievably lost to it, given the many conveyances which must have been caused by the war and the sacrifices it imposed on the peasants. The good results of this law led to the drafting of a liberal land bill, on modern principles, intended to complete the work begun. Guided by experience of the preceding law, this bill aimed at providing for all possible cases, especially for that of compulsory sales of peasants' holdings, and at preventing all evasion of the rules established. While the *Grundverkehrsordnung* aimed only at erecting a barrier against the further absorption of peasant hold-

(1) A clear sign of indifference in this connection is the fact that there are no official statistics as to the absorption of the peasant holdings.

ings, the law of 31 May 1919 took a further step forward in that it proposed to reconstitute peasant holdings which had been absorbed into large estates.

The publication of this law, *Gesetz über die Wiederbesiedlung gelegter Bauerngüter und Häusleranwesen*, printed in No. 310 of the "Reichsgesetzblatt," was one of the most important legislative measures taken by the young Austrian republic's Ministry of Agriculture. The law will soon be put in force, after much preliminary work, and it aims at restoring to their original purpose the lands taken from the peasants after 1 January 1870 and at constituting new agricultural holdings. Various rules, contained in the law, for guaranteeing the economic efficiency of the new peasants' holdings are remarkable. For example, land is granted to applicants only if they are in a position to prove that their knowledge and capacity are such as to ensure that regular and suitable farming of the holding which is necessary to its lasting productiveness (§ 4). Holdings prevented by their insufficient area or unfavourable situation from affording means of sustenance are, in general, unavailable for applicants. In order that the purchase-price may not constitute too heavy a burden for the new settler, it is, in general, forbidden that such price be equal to more than ten times the value of the net yield as estimated for purposes of the land-tax (net revenue as by Cadaster, § 10) (1). Given the present plentifulness of money among the peasants in the lower districts of Austria, and the possibility of selling all agricultural produce easily at good prices, it is to be presumed that there will be a large demand for small agricultural holdings, the more so because the land hunger of the peasant population is in any case very acute. The erroneous belief still prevails that larger yields can be obtained only by the utilization of larger areas, the present farming methods being followed. It is therefore to be presumed that many peasants will buy back their former holdings, thus increasing the arable area to a far from negligible extent. Such buying back of holdings should be matter for congratulation whenever it affects areas hitherto cultivated extensively.

The areas which a large landowner has utilized intensively, perhaps even better than the peasants, and procured by joining scattered fields, previously hard to cultivate, and uniting them in a large farm worked as a unit, are in another case. Such estates are not few on the plain, where there are only isolated cases of a real absorptions of peasant holdings, and to these estates the law cannot bring the benefit which it is expected to bring to the general economy of the country.

But in the mountains it may often occur that no one will be found who wishes to take advantage of the opportunity of buying the former peasant's holdings. Present circumstances, the extraordinarily high prices of live stock, the lack of building material, implements, household goods, are not likely to promote and facilitate the constitution of new farms. It should also not be forgotten that unfavourable circumstances, generally the farm's

(1) See STRAUBINGER, *Das Wiederbesiedlungsgesetz*, Vienna, 1919.

financial ruin, were the cause of its sale. Since these circumstances have not been altered a farm which was not productive will not now yield much. Especially if it must bear the burden of a very high working capital, its reconstitution will offer little attraction.

On the other hand, a confident hope may be expressed that existing farms will make the most of the opportunity and consolidate their lands, thus increasing the capacity of these to carry productive live stock. Stock raising has greatly suffered in mountainous countries from the lack of sufficient pasturing districts. The benefit received will indeed be fully felt only if the peasant is enabled, by a better education, to make better use of these larger areas. For, as we have already shown, a larger farming area is of no use if it be not more scientifically cultivated. The technical instruction of the peasant of the mountain districts still leaves much to be desired; in this respect too he has been neglected. A wide and difficult but a fruitful field of labour here lies open to the activity of the agricultural authorities.

The existing laws need completion in another direction. It must above all be provided that conveyances of property be withdrawn from the domain of chance and speculation, and that not only by the *Grundverkehrsverordnung*, but also by the orders arising out of this law and the interpretation given to it. There are still burdensome services, lands utilized in common, lands held in scattered parcels and subdivided holdings, which are to no one's advantage. Medinger (1) proposes the establishment of regular settlement offices whose business it would be to solve all these problems. He also proposes a reform of entail (*Fideikommiss*) and the constitution of *Rentengüter*, of hereditary leaseholds, and of homesteads for discharged soldiers.

SPAIN.

THE AGRARIAN PROBLEM IN ANDALUSIA.

OFFICIAL SOURCES :

INSTITUTO DE REFORMAS SOCIALES : INFORMACIÓN SOBRE EL PROBLEMA AGRARIO EN LA PROVINCIA DE CÓRDOBA DISPUESTA POR REAL ORDEN DE 14 DE ENERO DE 1919. Madrid, 1919
 EL PROBLEMA AGRARIO EN ANDALUCÍA : CAUSAS DEL MALESTAR OBRERO EN ANDALUCÍA. Informe de los Ingenieros Agrónomos del servicio de Avance Catastral de la provincia de Sevilla. — *Boletín de Agricultura Técnica y Económica*, Year XI, No. 125. Madrid, May, 1919 (Also published in the *Boletín de la Junta Central de Colonización y Repoblación Interior*, Year 1, No. 2. Madrid, 2nd quarter 1919)

(1) MEDINGER : *Grossgrundbesitz, Fideikommiss und Agrarpolitik*, Vienna, 1919.

OTHER SOURCES :

- DE HIZA (Vizconde) : El problema agrario en España. Madrid, 1905.
- DE LOS ANDES (Conde) . El problema agrario andaluz. — *Boletín de la Junta Central de Colonización y Repoblación Interior*, Year 1, No. 2. Madrid, 2nd quarter 1919.
- DE TORRILION Y BONITA (Angel) . Notas relativas a la cuestión agraria en Andalucía. — *Ibid.*
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- DO. : Mis notas el problema agrario de Andalucía. *Revista Social*, Year XVIII, No. 225. Barcelona, June-July 1919.
- DE QUIROS (Constancio Bernaldo) : El espartaquismo agrario andaluz. *Revista general de Legislación y Jurisprudencia*, Vol. 134, Nos. 4, 5 and 6. Madrid, April, May, June 1919.
- See also *La Liga Agraria* (Madrid) and *La Agricultura Nacional* (Madrid).

If historical proof were necessary to show the Andalusian farmer's desire to enjoy the benefit of the whole product of his labour, and the natural reaction of such desire on the public authorities, it would be enough, without going back to the royal "notes" of 1571-3, which organized the settlement of the lands confiscated from the Moors, to recall the land settlement decreed on 5 July 1767 which in little more than four years transformed into fertile lands more than 100 leagues of desert in the provinces of Jaen, Cordova and Seville. These provisions, and those which followed them almost uninterruptedly until the middle of last century and appeared subsequently from time to time, indicate the deep-seated unrest in the economic and social conditions of the Andalusian agricultural population.

In order therefore thoroughly to understand the grave problem which exists in those provinces, the reasons of such unrest must be sought. This search we propose to make when we have briefly shown the agricultural conditions of the district. We will speak of what has been done and of what remains to be done in order that peace may return to the Andalusian countryside.

§ 1. AGRICULTURE IN ANDALUSIA.

Although Andalusia properly so called — taken as one of the 79 districts in which the 49 provinces of the kingdom of Spain are grouped — includes only the provinces of Seville, Cadiz, Huelva, Cordova and Jaen, Andalusia in the wider and more usual meaning of the name is applied to the richest territory of Southern Spain and also comprises the provinces of Granada, Almeria and Malaga.

It extends over 87,571 square kilometres and constitutes more than a fifth of the whole area of the kingdom.

Surrounded by the sea to the east and in its lower part it forms an immense valley which slopes down to the north of Sierra Morena and rises

to the south towards Sierra Nevada. Almost its whole length is traversed by the Guadalquivir and it is watered by numerous lesser rivers.

The fertility of Andalusia is well known: it is enough to recall that the basin of the Guadalquivir is very rich in wheat, and that the raisins of Malaga and Alicante constitute a great article of export which goes especially to North America and Great Britain (about 200,000 quintals a year).

Not merely extensive olive-groves but veritable woods of olive-trees are a characteristic of Andalusia, and in good years nearly three million hectolitres of oil are produced. The fruit trade is also very active, particularly as regards oranges and lemons, pomegranates, figs, almonds, dates and prickly pears which are exported in large quantities.

The province of Granada produces hemp in large quantities; that of Malaga is rich in sugar-cane and that of Almeria in esparto grass.

Cork is another exported product. Andalusian horses are famous and there are camel-farms in the province of Cadiz.

Production might however be much more abundant. The unproductive area, if the little irrigated province of Almeria and the province of Huelva, in which mines and sandy stretches abound, be excepted, is not very extensive compared with the land suited to cultivation.

But of this land nearly half is used as pasturage or abandoned. Most of the properties are vast and are occupied by the owner or accumulated in a few hands.

The following table, which contains statistical data drawn from information supplied by the *Junta Consultiva Agronómica*, deserves attention.

Distribution of Cultivated Area in Andalusia.

Province	Total area Sq. kilometres	Percentage cultivated	Percentage uncultivated	Percentage unproductive
Cadiz	7,342	13.5	45	11.5
Cordova	13,727	52.7	44.3	3
Huelva	10,138	30	19.2	14.8
Jaen	13,460	50.9	37.7	11.4
Seville	14,003	54.9	39.9	5.2
Almeria	8,704	34	45	21
Granada	12,768	41	47.6	11.4
Malaga	7,349	46	54.4	8.6
Total . . .	87,571	44.9	42.2	10.9

§ 2. HISTORICAL NOTES AS TO THE AGITATIONS OF THE AGRICULTURAL POPULATION.

We do not intend in this article to trace precisely the historical development of the agrarian movements of Andalusia. They followed on two essential factors, one prevailingly political and the other economic. Although these are, as is easily understood, closely connected, we must entirely neglect the former and confine our enquiry to the latter. It is certain that there is a long preliminary history of peasants' risings, but the first period as to which we have sure and detailed information began towards the middle of last century. In 1855, 1857 and 1861 there is news of bands of peasants in various parts of the Andalusian districts, armed with scythes and other agricultural implements, who not only dared to attack farmhouses, illtreating and sometimes killing the owners, but also occupied large villages, violently imposing their authority on the inhabitants. Episodic and more or less violent risings occurred at intervals until 1892 when bands of peasants made an attack, which was easily repulsed, on the town of Jerez.

This episode closed the first cycle of rebellion. The second was characterized by strikes. The first agricultural strike in Andalusia occurred as early as 1883 but until the beginning of the present century such strikes were neither frequent nor very important.

There was much agitation in the Cordovan country from 1902 to 1904 — labourers' trades-unions, strikes, disorder, riots, crops and stacks destroyed by incendiarism. No statistics of these strikes were kept, so that we do not know their number or prevailing character.

Shortly after this crisis in Cordovan territory, the *Instituto de Reformas Sociales* began to keep statistics of strikes. There was one strike in each of the years 1908, 1911 and 1912 and there were three in 1913 and 7 in 1914. Thus the movement was rapidly accentuated from 1913 onwards. It was localized especially in the Guadalquivir and Guadalete valleys in which grain is grown over vast areas. More than half the strikes occur during the grain harvest. Their object is almost always the increase of wages and the reduction of the working day, only one having been caused by the dismissal of a foreman. Of the 13 strikes hitherto noted, the workmen won 5 and lost 3 and received only partial satisfaction for their demands in the other 5.

In the first years of the war no great divergence from previous years was observed: according to the statistics mentioned above only ten agricultural strikes were proclaimed in the Andalusian districts from 1915 to 1917 and they were all local conflicts due to bad economic conditions which became general and were aggravated.

But in 1918 the period of acute agitation returned. In the province of Cordova alone more than 70,000 labourers had organized themselves in societies for resistance.

An agricultural labourers' congress, which took place in that province in October, made demands to which the landowners declared themselves unable to accede. Consequently the suppressed discontent broke out with impressive seriousness. During 1919, stimulated by the claims of an agricultural congress held in Seville in May, one strike succeeded another, fields, flocks and herds were abandoned, hostile acts were committed against landowners, strawricks, garnered crops, olive-groves and vast pinewoods were set on fire.

Repression by military force, persuasion exercised by influential persons, and concessions on the part of many landowners had the effect of gradually calming the spirits of the agricultural population.

Covert agitation continues in the Andalusian countryside, especially in Cordova, and the present situation is still sufficiently grave, but the period of acute crisis fortunately seems to be over.

§ 3. CAUSES OF THE DISCONTENT.

The agrarian problem of Andalusia may be considered in a double aspect, economic and social.

The Andalusian cultivator is goodnatured, not prone to hatred; and as in the past he did not hate his masters when he suffered from hunger, so he would not have risen against them now had he not been stirred up by social and economic changes.

His lack of education is favoured by the isolation in which he works and the absenteeism of the large landowners who let their wide lands. He suffers from the complete absence of agricultural schools and of attempts at co-operation and, until recent times, of association. The present trade-unions pay no direct regard to agriculture but only think of resistance, right or wrong, to masters. The Andalusian peasant is also demoralized by seeing land as fertile as that on which he works producing less than it might, because it is cultivated unscientifically or because the large landowners leave much of it uncultivated. It is therefore no wonder that the peasant easily listened to agitators. Moreover the rise, on the one hand, in the cost of all necessities — food, clothes, lodging — and the lowness, on the other hand, of wages, in spite of the hardness of labour, could not but prevent the wellbeing of the agricultural population.

It should be added that many landowners, who were obliged to increase wages eight or ten years ago in order to intensify cultivation, found themselves afterwards obliged to employ only the labourers indispensable to cultivation admitting of no delay; and thus cultivation was limited and many labourers were unemployed.

The European war ensued to render conditions worse. The increase in the cost of the means of subsistence took on proportions which were more and more disquieting, while other preoccupations diverted the attention of the press and influential citizens from the business of solving the agrarian

problem. It should be remembered that there is no agricultural party in the Spanish parliament although the country is eminently agricultural.

If to all this be added the fact that it is the dream of every cultivator to own land and enlarge his holding, we have an idea of the economic and social causes of the discontent of the Andalusian peasant.

§ 4. PROVISIONS MADE AND TO BE MADE.

The normal conditions of the agricultural population of Andalusia have always constituted one of the grave preoccupations of the central government and of specialist students of agricultural economy.

In recent years there has been, as well as the general provisions for the improvement of agriculture throughout the kingdom, a whole series of provisions which refer exclusively to the Andalusian district.

From the time when it was founded the *Instituto de Reformas Sociales* seriously undertook the examination of this problem and made definite proposals which will give the authorities a basis on which to propose provisions and reforms.

In February 1903 a competition, for which the king gave prizes, was held for papers on "The Agrarian Problem in the South of Spain. How the Interests of Landowners and Labourers may be Harmonized. Means of Increasing the Production of the Soil." "Seventy-eight papers were," to quote the report, "submitted by humble priests who expounded their ideas simply, by students skilled in natural and agronomic science, by labourers of small means, by discharged soldiers, engineers, doctors, teachers, rich agricultural landowners."

Three years later the Minister of Agriculture sent a special commission to Andalusia to investigate the grave problem.

The conditions of the rural population became, as we have seen, worse, and in January 1918 a committee of the *Instituto de Reformas Sociales*, over which this body's president, Viscount de Eza, presided, went to Andalusia. The royal decree, published on 31 April of this year and aimed at preventing conflicts, was inspired by the proposals of this committee.

With the same object a Special Commissioner of Security and Vigilance was appointed and sent to Andalusia in May 1919.

In the following June an enquiry was made by royal order into the distribution of rural property in the provinces of Caceres and Badajoz, Seville Cadiz, Cordova, Jaen, Malaga and Salamanca and their productiveness, and it was requested that possible improvements should be studied.

The royal decree of 6 June 1919 provided for the acceleration of enquiries and for works of irrigation in the Lower Guadalquivir Valley. It completed the work of the Irrigators' Syndicate, active since 1911. A similar decree was published six days later for extending irrigation from the Guadalquivir and the Guadalete.

But much remained to be done before the development of agriculture

in these districts and the wellbeing and quiet of the rural population could be ensured.

A grave question is that of the subdivision of large properties. To many it seems desirable that the vast areas of government and communal land should be distributed in small lots to cultivators, not as leaseholds but as freeholds, to be paid for by instalments over long terms of years. Such is the opinion which Mr. Augusto Gonzales Besada expounded in 1906 in his 'Memorial as to the Land Settlement Bill.'

Count de los Andes states that "it is indispensable that the labourer should have an interest in what he produces and identify himself therewith," and that this can be accomplished by giving him a share of the profits of agriculture, thus making him the natural opponent of strikes and making it his interest to work hard.

A question-form of the afore-mentioned committee of the *Instituto de Reformas Sociales* evoked from competent persons and employers' and labourers' associations other proposals, of which we cite the chief.

It would above all be opportune to introduce agricultural credit, now unknown in Andalusia: agricultural banks would be immensely useful if they were set up side by side with peasants' and landowners' associations.

Insurance against accidents, and more especially insurance against old age and sickness, could rescue the Andalusian cultivator from his miserable condition and rouse his dejected spirit.

Very particular care should be given to removing the ignorance in which he lives, by multiplying schools, and by introducing higher and lower agricultural instruction both theoretical and practical.

At the same time a stop should be put by legislation to the absenteeism of the large landowners and they should be forced to return to their lands. Their exploitation of their tenants, and the exploitation which these in their turn practise on the labourers, would thus be prevented.

It is however plain that none of these are immediate remedies, and that even if they could be applied immediately they would produce effects only after a longer or shorter interval of time.

The committee over which Viscount de Eza presided proposed immediate measures for the province of Cordova. Mixed municipal committees, composed of employers and labourers and presided over by the respective mayors, were to be set up. Their members would make agreements as to the conditions of agricultural labour. In the town of Cordova a mixed provincial committee was to be set up, which would be responsible for watching over and inspecting the municipal committees, would act as a court of appeal for the latter committees when they failed to reach agreement, and would be responsible for interpreting doubtful clauses in agreements and for facilitating their fulfilment. It was also proposed that in case negotiations between employers and labourers broke down there should be recourse to arbitration. Finally, the government was invited to make these provisions applicable to the other provinces.

The landowners of some agricultural centres have already consented to

make notable concessions to the peasants, not only raising their pay but also, in many cases, granting them land to work directly on their own account. On the other hand, not a few cultivators' trade-unions have understood that in their own interest they must not be exacting in their claims. If these examples are more universally followed and if the proposed measures of improvement are carefully carried out, the peace which is beginning to return to Andalusian villages will not again be disturbed and it will be possible to say that the agricultural problem has been finally solved.

SWEDEN.

COLLECTIVE LABOUR HIRING CONTRACTS IN AGRICULTURE.

OFFICIAL SOURCE :

DTN KOLLEKTIVA OVTALSFORMEN INOM JORDBRUKET (*The forms of collective contract in agriculture*), in *Sociala Meddelandes*, Nos. 7-8, 1919.

§ 1. TRADE UNIONISM IN SWEDISH AGRICULTURE.

The Swedish peasants kept on the whole outside the modern labour movements which largely manifested themselves among industrial workers. In general there were in agriculture patriarchal relations between employers and employed which excluded all that harsh conflict of interests whence arose the elements of trade organization in industry, whether of workmen or of employers. The sporadic efforts which led in some rural districts to collective movements among peasants, for the purpose of demanding better working conditions and wages and for drawing up collective labour hiring contracts, remained localized in a few farms or in a few districts, or, at the most, lost strength and gradually faded away when once they had attained to their immediate ends. The movement which manifested itself in the country last summer, and dealt with the question of wages and hiring agreements, seems however to have brought the problem of the agricultural labourers to be regarded as a social problem on the same level, with respect both to its vastness and to its consequences, as that of the industrial workers.

The agricultural labourers are now organized in two trade associations, the Swedish Agricultural Labourers' Federation (*Svenska Lantarbetarersförbundet*) and the Federation of Agricultural Labourers of Upland (*Uppländska Lantarbetarförbundet*), of which the latter was formed last year

while the former represents in its present form the revival and enlargement of an older organization. After a first movement for higher wages among the peasants of some farms of Skåne province, supported by a trade association which was dissolved when the question of wages was settled, a Federation of Agricultural Labourers of Skåne (*Skånska Lantarbeterarförbundet*) was constituted in 1904. It developed largely in the four next years and brought about, after several strikes, some of them of long duration, the regulation of wages and working conditions in various places. Independently of this organization, there was formed in 1905 the Central Swedish Agricultural Labourers' Federation (*Möllersta Sveriges Lantarbeterarförbundet*) which was merged in 1908 with the Skåne organization, the two becoming the Swedish Agricultural Labourers' Federation (*Svenska Lantarbeterarförbundet*). This latter asked and obtained enrolment in the national organization, with a membership of about 10,000. This rapid progress was soon followed by a rapid retrograde movement. Hardly were conditions as to wages improved by the trade federation than the peasants showed that they were little interested in the work of their organization; and when, partly as the effect of a strike of communal workers in Malmö in August 1918, the resistance of the labourers in Southern Skåne seemed to be vacillating, there was a general exodus from the Federation, which, on the other hand, grew during the great strikes of the next year to an extent which undermined its economic position and entirely prevented its further development. The Federation was obliged to retire from the national organization and it was only ten years later, in 1918, that it could, on the initiative of the national organization, be entirely reconstructed. After ten years of renewed activity it now again has about 10,000 members distributed among the five provinces of Skåne, Blekinge, Östergötland, Södermanland and Västmanland-Dalarna, with smaller sections in the provinces of Västergötland, Värmland and Halland. The Uppland Agricultural Labourers' Federation groups, according to the most recent data, about 4,000 labourers.

In consequence of the extension of the labourers' movement the agricultural employers also organized themselves. The Skåne Agricultural Employers' Association (*Skånska lantmannens arbetsgivarförening*) and the Association of Farmers of the Kristianstad District (*Kristianstads läns jordbrukareförening*) were the first to arise, and were followed by local associations in various districts of the kingdom. In 1902 these organizations formed a national organization called the Representation of the Swedish Agricultural Employers' Associations (*Svenska lantarbetsgivarföreningarnas hullmäktige*). Ten associations now exist with about 1,500 members of whom several represent rural enterprises which farm a large number of holdings.

§ 1. THE MOVEMENT FOR A COLLECTIVE LABOUR HIRING CONTRACT.

At the beginning of the summer of 1919 the labourers' organizations brought forward a scheme for a collective hiring contract which would

have been in force from 1 October 1919. At the same moment a movement arose in various parts of Uppland for obtaining an increase of wages for the remainder of the year in the form of a bonus to meet the higher cost of living. It was such demands for wages which principally caused the first local strikes in the province of Uppland in July. When the land owners were unwilling to treat with the labourers' federation on the basis of the prepared scheme for a collective hiring contract, the labourers took this as a refusal to recognize the collective form of contract in agriculture, and larger strikes ensued (30 July) in which all holdings in Uppland on which the peasants belonged to the federation were involved. The proportions of the movement soon so increased that it came to include a considerable part of the province of Västmanland. The conflict threatened also to extend to Södermanland and Skåne where on 1 August the government appointed a special commission to end the dispute.

The preliminary condition was made that landowners should recognize that they were not averse from the principle of the adoption of the collective contract, and since this assurance was obtained from them the question which had supplied the chief motive for the strikes was eliminated. These in fact ceased from the date, 8 August, on which the negotiations opened in Stockholm.

Agreement being reached, by the commission's intervention, between the employers' association and the two labourers' federations, on the one hand a national contract, which included the general provisions as to work and wages, was drawn up, and on the other hand local contracts for the provinces of Uppland and Södermanland, for the rural districts of the provinces of Västmanland and Skåne, and for the province of Östergötland, in which last, however, the contract was formulated after various negotiations additional to those undertaken by the commission.

§ 3. THE NATIONAL AND THE LOCAL LABOUR HIRING CONTRACTS.

The national contract, drawn up on 20 August 1919, by the *Svenska lantarbetsgiverföreningarnas fullmäktige* on the one hand and the *Svenska Lantarbetarersförbundet* and *Uppländsku lantarbetarersförbundet* on the other, first fixed the forms of hiring single labourers and recognized the right of association in both contracting parties, and then referred to the local contracts the business of fixing working hours and payment for overtime, merely stating that night work, that is work done between 9 p. m. and 5 a. m., should be paid for at a rate 50 per cent. higher than that fixed for overtime. The contract establishes the right to a holiday on the afternoon of Christmas-day, New Year's day, Easter day, Whitsunday, and the Feast of the Assumption, the first Saturday in June and on days of political and administrative general elections, and also the right of workers receiving annual wages to seven days' holiday in the year. It provides that local contracts must fix minimum wages for able-bodied

men labourers over eighteen years of age, specifying minima for the various kinds of labourers, and it lays down rules for insurance against accidents and for the settlement of disputes between employers and labourers.

The conditions as to wages which the various local contracts fix are substantially the same in Uppland, Södermanland and Västmanland, but the rate of wages in Skåne is below the average for all Sweden, and in Östergötland is nearer to the rate in Skåne than to that in Svealand. A large proportion of the labourers on the big farms is made up of *skattare*, who receive a considerable part of their wages in kind. According to the contracts concluded, these payments in kind must consist of 1,350 kilogrammes of grain (1,300 in Uppland and Södermanland) a year; in a certain number of litres of milk a day (according to the Skåne contract 3 litres of unskimmed and 2 litres of skimmed milk; in Västmanland 4.5 litres of unskimmed milk or 3 litres of unskimmed and 3 of skimmed milk); in a lodging to consist of a room and kitchen, necessary annexes and a garden; in wood for domestic fuel (in Skåne there are various rules on this point); in straw or litter; in 10 to 15 ares of land as a potato patch; and in medical attendance and the free supply of drugs to the labourer and his wife and minor children who live with him. To these wages in kind, cash wages are added at the following rates: to a farm hand 900 crowns a year in Svealand, 825 crowns in Östergötland and 800 crowns in Skåne; to herds and stockmen who do herding 1,150 crowns, 1,025 crowns and 900 crowns in these respective provinces. Farm hands living at their employers' expense receive 950 crowns, 825 crowns and 750 crowns in these respective provinces.

Labourers who receive no wages in kind are paid in Södermanland and Västmanland 8.50 crowns a day in the summer and 6.50 crowns in the winter half-year; in Östergötland 8 crowns and 6 crowns a day in these respective seasons; in Skåne a wage per hour equal throughout the year, of 0.75 crown. If payments in kind are made in the form of lodging, fuel and potatoes, one crown is deducted from the daily and 0.10 crown from the hourly wages. There are also special rules as to the manner in which payments in kind other than those fixed should be calculated for labourers who do not enter into any of the groups specifically contemplated by the collective contracts. These latter labourers have the right to a daily wage equal to that of labourers receiving no payments in kind, less the ascertained value of such payments in kind as they receive.

SWITZERLAND.

THE FOOD-SUPPLY CRISIS AND STATE ACTION TO OVERCOME IT (*continued*) (1).

IV. — POSITION IN 1919 AND PROVISION THEN MADE.

§ 1. NEW MEASURES FOR THE INCREASE OF PRODUCTION.

The armistice of 1918 put an end to hostilities by land and sea, but the general conditions of victualling could not at once be notably modified. There were those who believed that the end of the war would greatly improve the troubled existence of nations, but their illusion was brief, very soon ended by hard contact with facts. The world's production of supplies was not increased by the cessation of hostilities, while consumption grew instead of diminishing. Moreover the passage from a state of war to one of peace and the social convulsions produced in almost every country reacted gravely on the economic life of European States. It was necessary to continue in the path followed hitherto and to persist with the wartime economic policy which had saved the country from certain ruin.

The first important decree issued in 1919 which regarded agricultural production was the federal decree of 15 February 1919 and it is concerned with the measures to be taken in order to improve the production of foodstuffs. It completes the decree of 15 January 1918 and determines the obligation to cultivate in 1919 (1).

The fundamental part of this decree covers the following chief points : the maintenance of the area planted with grain and root crops in the previous year ; the opportunities to be granted to growers as regards their choice of various crops ; and the continually increasing co-operation of the non agricultural classes in the production of foodstuffs.

The decree in question insists in particular on potato-growing, and rules that the area planted with potatoes must at least not be less than in 1918.

The obligation to cultivate was on the other hand somewhat altered in that the farmer is now free to determine the proportion he devotes to each crop of the total area he is compelled to cultivate, saving that, as we have said, the area planted with potatoes must not be less than in 1918. Moreover, the obligation to cultivate in 1919 is fixed in relation not to the area

(1) For the sources, see the first part of this article, which appeared in our issue of March 1920.

(2) See also the circular issued by the Federal Office of the Food-Supply to cantonal governments on 21 February 1919 as to the increase of the production of foodstuffs, a circular concerned with this decree.

compulsorily cultivated in 1918 but to that effectively cultivated in that year.

In order to ensure potato growing it was thought necessary to give a certain guarantee to growers by fixing basic prices. The Federal Victualling Office was therefore authorized to buy home-grown table potatoes in the autumn of 1919 at a price corresponding to the usual expenses of production and the state of the market, a price which might not be less than 15 francs the quintal.

A fundamental provision was inserted in the decree as to the participation of industry, trade, etc. in the production of foodstuffs. In connection with this participation the fact should be noticed that during 1918 there were founded in Switzerland two societies whose activity deserves notice since it is their aim not only to encourage agricultural production but also to provide useful work for the unemployed. They are the Swiss Association for Industrial Agriculture and the Swiss Society for the Cultivation of Gardens. The former, founded at Zürich on 8 July 1918, included in its first year of activity 158 industrial enterprises which united in societies in order, by works of breaking up land and cultivation on a large scale, to supply the working class's hourly increasing need of provisions. These works were also to serve to provide work when times and cases of unemployment should arise. And in that it faced the problem of settlement this society tended to become a true Swiss land settlement association (1). The federal decree of 15 February 1919, which we are analysing, abandons the coercive measures obliging factories and other industrial and commercial establishments and enterprises to participate in the production of foodstuffs, but it declares that whenever such establishments have, with the help of the cantonal authorities, rented lands capable of being improved, they are obliged to undertake the necessary improvements and to bring into cultivation the lands rented for this purpose.

Moreover the cantons can constrain industrial and other enterprises and communes to co-operate with associations of public usefulness which aim at intensifying the production of foodstuffs.

The cantonal authorities were authorized by this decree to oblige all landowners whose lands can, by improvement, be fitted for the growing of foodstuffs, immediately to improve and cultivate these lands, on pain of having them expropriated, and improved by the cantonal authorities directly with the support of the Federation. Communes may be invested with this power by the cantonal governments if they present sufficient guarantees.

§ 2. SUBSIDIES GRANTED BY THE FEDERATION.

The federal decree of 15 January 1918 provided (Article 29) grants for procuring cultivable land and for supplying seed to persons needing it, and for the acquisition of agricultural machinery and ploughs by cantons

(1) See in this connection the article in our issue of May 1919.

or associations of public usefulness (1). The expenses incurred by the Federation up to 31 March 1919 under this head and for subsidies granted to cantons were as follows :

(1) Leasing of cultivable lands and supply of seeds . . .	44,551 francs
(2) Purchase of agricultural machinery and ploughs. . .	126,901 »
	<hr/>
Total . . .	171,352 »

§ 3. PROVISION OF CHEMICAL MANURES.

Chemical Manures and Sulphate of Copper. — During the war Germany supplied Switzerland with large quantities of potassic salts and Thomas basic slag coming from Alsace-Lorraine. After the armistice the Federation addressed itself to the French government and the factories of Alsace-Lorraine, which received its orders in suchwise that the importation of potassic salts was resumed at the beginning of 1919. Almost at the same time the importation of potassic salts and Thomas basic slag was resumed from Germany, as was, in consequence of the overseas importation of mineral phosphates, the manufacture of superphosphates. The need for nitrogenous fertilizers could be supplied, thanks to the cyanamide, the sulphate of ammonia and the nitrate of soda manufactured in the country.

But the condition, as regards yield, of the Swiss soil is now far otherwise than good, precisely because of the insufficient use of fertilizers during the war.

For example, a communication made to the International Institute of Agriculture on 24 May 1919 by the agricultural division of the Swiss Department of Public Economy showed that the meadows and crops of Switzerland were infested in 1919 by an enormous number of dandelions which wrought grave damage especially to land sown with grain. This pest was due to the soil's poorness in phosphoric acid. Following on the almost complete lack of phosphate fertilizers from 1915 onwards, the balance of fertilizing elements was destroyed : nitrogen in particular, imparted to the soil by stable manure, has a predominant influence and provokes the growth of ammoniac plants which take up all the room and stifle the more valuable plants, in particular clover and good grass.

Even if the need of Swiss agriculture for potassic and nitrogenous manures could be once more supplied, Switzerland would still have great difficulties to overcome before she could procure the phosphate fertilizers of which her agriculture is in urgent need. Time would be necessary before

(1) This matter is explained more precisely and in greater detail in two circulars of the Swiss Department of Public Economy of 6 July 1918 and 28 April 1919.

the demand could be satisfied even partially and before these fertilizers could be supplied at moderate prices.

The supply of the country at reasonable prices with the chemical fertilizers necessary to agriculture and with concentrated cattle foods is certainly one of the chief conditions of that development of production on which depends the gradual lowering of the present very high prices of foodstuffs.

The federal institutions of experiment and agricultural analysis continue very actively to exercise that control and superintendence of the manufacture and sale of chemical fertilizers, cattle-foods and remedies for plant diseases which was entrusted to them under the federal decree of 22 December 1917 and the resolution of the Swiss Department of Public Economy of 7 January 1918.

§ 4. FEDERAL CONTRIBUTION TO THE MILK SUPPLY.

During the war the federation had to do a vast work in order to ensure the population's milk supply, and it made a direct contribution in the shape of federal grants to associations of milk producers and otherwise. Without entering in this connection into too much detail we may state that the general grant to milk producers' associations in the half-year from 1 November 1918 to 30 April 1919 was 3 centimes per kilogramme of milk produced for consumption, with another centime per kilogramme sold in any large town.

The expenses borne by the Federation for the milk-supply in the afore-said winter half year were as follows

A. Contribution to milk producers' associations . .	12,160,000 francs
B. Grant for milk sold at lowered price	5,100,000 »
C. Grant for milk sold to persons receiving articles of diet at reduced prices	5,400,000 »
Total . . .	22,660,000 »

§ 5. THE CENSUS AND THE NEW STATISTICS OF CROPS.

We reproduce the figures obtained from the census of live stock made on 24 April 1919 together with those supplied by the two previous census, that of 1916 and that of 19 March 1918.

On 27 May 1919 the Federal Council ordered statistics to be drawn up of the crops of Switzerland. We give the provisional figures, recently published by the Federal Office of Statistics, and place them side by side with the statistics of 1917. The figures were compiled in accordance with summaries made by the cantonal and district authorities. The Federal Office of Statistics received the last data pertinent to this enquiry on 3 October 1919.

TABLE V — *Census of Live Stock.*

	1916	1918	1919
Horses	136,836	128,971	123,762
Mules	3,079	3,092	3,253
Asses	1,288	1,072	956
Cattle	1,615,893	1,530,522	1,432,491
Pigs	544,563	365,798	464,402
Sheep	172,938	229,649	263,729
Goats	358,887	356,455	349,794

TABLE VI. — *Statistics of Crops in 1917 and 1919.*

	1917	1919
	hectares	hectares
Cereals	117,337	137,656
Leguminous crops	2,846	2,554
Root crops	65,674	62,305
Vegetables	5,127	5,743
Industrial crops	687	1,208
Total	191,668	209,459

The number of grain growers passed from 182,291 in 1917 to 219,620 in 1919; that of potato growers from 418,769 in the former to 435,297 in the latter year.

In spite of the great difficulties of various kinds in the way of the intensified resumption of agricultural work, these figures show a noteworthy increase in the area cultivated in 1919 as compared with that cultivated in 1917, which is favourable testimony to the work of the Federation and the cantons and shows that the provisions they made in this connection were carried out.

§ 6. THE AGRICULTURAL LABOUR SUPPLY AND THE RURAL EXODUS.

We have several times alluded in this article to the grave problem of the agricultural labour supply, of which the deficiency was much felt in Switzerland during the war. The causes of this deficiency in Switzerland

are not much different from its causes among belligerent nations and are so well known that it is unnecessary to dwell on them. We have seen the steps taken by federal, cantonal and communal authorities in order to mitigate the losses dependent on this deficiency and their provisions for preventing that the consequent injury to agriculture should be too serious. The evil was accentuated during the war especially because able men were everywhere under arms, Switzerland, with her armed neutrality, being unable to escape from this necessity.

But the problem of the agricultural labour supply had arisen and had presented alarming symptoms even before the war. The phenomenon known as the rural exodus existed and was the object of enquiry and study in almost all countries.

In Switzerland it was made matter for public discussion on 5 December 1917 by the National Councillor Schaer, who proposed the following motion at the session of the National Council of that date :

" The National Council is invited to study the measures to be taken in order to prevent the loss accruing to the country from the depopulation of our mountain and country communes and from an excessive emigration of agricultural labourers after the European war has ended " (1).

On 12 March 1918 the Federal Department of Public Economy invited the Swiss Peasants' Secretariat to present a report on this matter, and after long and minute research the Secretariat remitted to the Department on 20 April 1919 the results of its enquiries. This report was published at the end of 1919 (2).

Its statistical part throws light on the period from 1880 to 1910 where the depopulation of the countryside is concerned. It shows that the total population and the rural population of Switzerland respectively increased and diminished between 1880 and 1910 as follows :

Increase of total Swiss population: 325.4 per thousand.

Decrease of rural Swiss population: 121.6 per thousand.

But this thinning of the agricultural population, thus ascertained, does not imply a reduction of agricultural production. On the contrary, production has appreciably increased in the last decades. The Swiss Peasants' Secretariat, basing itself on minute calculations, valued it at about 620,000,000 francs towards 1895 and at 950,000,000 francs in 1911, so that it had increased by 320,000,000 francs or 53 per cent. during these fifteen or sixteen years. Allowing for the influence of variations in prices, a net increase of production by 7 per cent. remains. These figures give an aver-

(1) Schaer's motion is noticed in our article on the Swiss Peasants' Union and Peasants' Secretariat during 1918, which appeared in our issue for November-December 1919.

(2) *Mesures propres à lutter contre la dépopulation des communes montagnardes et rurales. Présenté au Département fédéral de l'économie publique par le Secrétariat des paysans suisses.* Brougg, Imprimerie Effingerhof, A. G., 1919.

age production per head of the able-bodied agricultural population of 1,320 francs in 1895 and 2,130 francs in 1911.

These facts show that in all probability the contribution of agriculture to the victualling of the country has diminished less than has the proportion of the total population which is agricultural.

In the second part of its report the Swiss Peasants' Secretariat shows what measures should be taken in order to preserve their population to rural and Alpine communes, and amply explains these measures. It proposes the following as specially adapted to oppose the rural exodus: the development of land settlement, a subject with which we dealt in our issue for May 1919 when we examined Dr. H. Bernhard's article in *Zeitschrift für schweiz. Statistik und Volkswirtschaft*, No. 4, 1919; the improvement of the department for placing agricultural labour and the development of social legislation; the supervision of emigration agents and of the propaganda in favour of emigration; the revision of the federal law as to the improvement of agriculture by the Federation; the realization of the value of agricultural products.

We cannot elaborate this argument further since it is not directly part of our subject. We will return to it on another occasion.

§ 7. REPEAL OF WARTIME MEASURES.

In the autumn of 1919 the compulsory provisions connected with the obligation to grow grain and potatoes were repealed. As much can be said of vegetables and other field crops. A series of provisions for the rationing of foodstuffs were also repealed and the food-cards connected with them abolished. Only cards for milk, cheese and sugar now exist in Switzerland.

The Federal Office of the Food Supply considers that in present conditions the compulsory provisions are no longer justified, but it will co-operate in the future with the institutions of experiment and agricultural research and the agricultural associations in encouraging extended grain growing.

The rationing of bread and the milling permits of producing consumers were abolished at the same time. The producing consumer of grain can now dispose of whatever quantity of breadmaking grain he desires for his own nourishment. Only the Federation is authorized to purchase home-grown breadmaking grain. The purchase is made through the medium of the Federal Bread Office. The use of home-grown breadmaking grain for feeding live stock is still forbidden.

The provisioning of the country with potatoes is also now left to private initiative.

The Federal Council decided, on the other hand, to continue for 1920 Article 4 of the decree of 15 February 1918 as to compulsory letting: the cantonal authorities may therefore apply it in 1920 and thus have at their disposal cultivable lands for small farming.

The Federation's contribution to the expenses of procuring cultivable lands and seed was brought to an end, as was its contribution to grants for the purchase of agricultural implements and machinery.

The Federal Department of Public Economy and the Federal Office of the Food Supply also decided to repeal from 1 January 1920 such war regulations regarding the trade in live stock as remained in force. It is however their present intention to issue provisions regarding this trade based on the federal law of 3 June 1917 as to foot-and-mouth disease, provisions which are within the competency of the Federal Council under Article 9 of this law.

* *

We have thus seen that the position of Switzerland during the world war was almost unique in the economic and political history of European States. Surrounded by the most formidable belligerents this country had a very hard task to fulfil during the five years of war. The position of the food-supply of this country, largely victualled from abroad, became steadily more critical, for needs could be met only in a decreasing measure and in strict relation to the reduction of the world's available supplies and the lack of means of transport.

Swiss home resources were also much affected by the war, since the armed neutrality absorbed the country's best energy and disabled it from maintaining agriculture and the production of foodstuffs at the level to which the technical means at its disposal had made it possible to attain.

If, in spite of all these difficulties, Switzerland succeeded in overcoming the crisis, it was largely because of the great and persistent effort of the whole nation to extract from the soil as much as was possible in the circumstances.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

BESSARABIA,

THE WAGES OF AGRICULTURAL LABOURERS. — GURGEEA (E.): "Salariul mijlociu al lucrătorilor agricoli din Basarabia în 1901-1913 și 1918-1919", in *Boletinul Statistic al României*, Series IV, Vol. XIV, No. 2, 1919, Bucharest, 1920.

The wages of agricultural labourers, which slightly increased between the five-year periods 1901-5 and 1906-10, and which were subject only to negligible variations in the few years before the war, rose to an exaggerated

edly high level in 1918 and to one yet higher in 1919. We show in the following table the average wages received by the several classes of labourers for the several kinds of work in the periods 1901-5 and 1906-10 and in the years from 1909 to 1913 and the years 1918 and 1919.

Average Daily Wages of Agricultural Labourers in Lei.

Kinds of Work and Classes of Labourers	Average 1901 to 1905	Average 1906 to 1910	1909	1910	1911	1912	1913	1918	1919
<i>Sowing:</i>									
Labourer having cart, not boarded	3.88	4.92	5.58	5.05	5.58	6.38	5.71	44.80	71.47
Ordinary labourer, not boarded . .	1.54	1.75	2.26	1.59	1.59	2.12	1.86	11.61	15.14
" " boarded. . . .	1.11	1.27	1.19	1.33	1.33	1.72	1.46	9.37	9.72
Women labourer, not boarded. . .	1.09	1.22	1.33	1.19	1.33	1.72	1.59	11.08	13.41
" " boarded	0.87	0.95	0.93	1.06	1.06	1.33	1.06	9.29	9.39
<i>Mowing</i>									
Labourer having cart, not boarded	4.25	4.78	5.32	5.45	5.18	6.51	5.98	53.48	75.32
Ordinary labourer, not boarded . .	1.83	1.99	1.99	2.26	1.99	2.66	2.39	13.74	17.00
" " boarded. . . .	1.51	1.59	1.46	1.72	1.72	2.12	1.72	11.40	11.16
Women labourer, not boarded. . .	1.30	1.48	1.46	1.73	1.59	1.99	1.72	13.37	16.43
" " boarded	1.09	1.17	1.06	1.33	1.33	1.59	1.33	11.40	12.22
<i>Harvest:</i>									
Labourer having cart, not boarded	4.41	5.24	5.18	5.71	6.38	6.38	6.51	53.70	79.62
Ordinary labourer, not boarded . .	1.88	2.26	1.99	2.52	2.26	2.79	2.66	13.96	17.01
" " boarded. . . .	1.59	1.62	1.46	1.86	1.86	2.12	1.90	10.87	12.33
Women labourer, not boarded . .	1.33	1.62	1.46	1.86	1.59	2.12	1.99	13.60	16.45
" " boarded	1.09	1.25	1.19	1.33	1.40	1.72	1.46	10.97	12.27

The depreciation of the lei, which has certainly had much to do with the considerable increase in wages, seems insufficient to explain this increase. In this connection the great differences in the wages received in different districts by labourers of the same kind is significant. In the sowing season the pay of a labourer who had a cart and was not boarded ranged in 1919 from a minimum of 13.40 lei in the district of Ismail to a maximum of 150 lei in that of Orhei, and the pay of an ordinary labourer receiving no board from a minimum of 8 lei in the district of Bălți to a maximum of 22.40 lei in the district of Chisinău, while the pay of an ordinary boarded labourer went from a minimum of 5.90 lei in the district of Cahul to a maximum of 16.80 lei in the district of Tighina. The pay of a woman labourer, not boarded, went from a minimum of 8 lei in the district of Bălți to a maximum of 22.40 lei in the district of Chisinău, and that of a boarded

women labourer from a minimum of 8 lei in the district of Ismail to a maximum of 16.80 lei in the district of Tighina. These differences are enough to show that other causes, as well as the depreciation of money, have contributed to raising wages in recent years, namely causes of a political and social character which have greatly altered the position of the labour-market.

FRANCE

11 THE DISTRIBUTION OF HOLDINGS IN DETACHED PLOTS. — Communication by M. Arthur GIRAULT, professor of [the] faculty of law of Poitiers, to the Academy of Agriculture of France (meeting of 10 December 1919).

When in the first half of last century the survey of the distribution holdings was made, it appeared that there were, in round figures, 125,000,000 detached plots. Has this number increased or diminished? In other words, if the survey of all French communes were remade tomorrow would there be more or fewer plots than nearly a hundred years ago? The question is much discussed amongst economists and agriculturists. It is peculiarly interesting at a time when the use of agricultural machinery, for which fairly extensive plots are necessary, forms a preoccupation. A very general opinion is that the number of plots has increased. It is supported by citing the traditional prejudice of peasants who, when the case of a succession has arisen, have habitually divided every field into as many pieces as there have been heirs. This impression is confirmed by an inspection of the land-survey registers; but it is, on the other hand, important to notice that when a landowner buys a neighbour's field the two plots of land, which have come to form only one, still figure as two items in the land-survey register. A less superficial enquiry could alone reveal the true state of the matter.

Such enquiry was made by M. Arthur Girault in the case of more than one hundred communes, and he reached the following conclusions.

There are, in the first place, many communes in which the number of plots has diminished. Thus in Haute-Marne there are 18 communes in which the land-survey has been remade, almost all of them in the *arrondissement* of Wassy. In all these communes except one (Antigny-le-Grand), the number of plots has lessened, and in some of them the diminution is very great, amounting to more than a quarter, or sometimes even more than a third, as in Chatourupt where from 7,031 it has become 4,112. We should notice that a country of small holdings, in which subdivision is excessive, is here in case. At Chatourupt there used to be 7 and there are now 4.3 plots to the hectare.

In the same way in the Vosges at least 12 resurveyed communes could be cited in which the number of plots has lessened and in none of which it has increased. The same is true in the eastern district, in the commune

of Villeneuve-aux-Chemins (Aube) because vine growing has been abandoned there, and in the commune of Ay-en-Champagne (Marne).

In the Parisian district the tendency is less marked. In Seine, while at Villetaneuse the number of plots has increased by only two, in Boulogne it has passed from 5,662 to 7,875, but this is a result of the increase of urban buildings (Curiously, the number of landowners has fallen from 4,301 to 3,448). In Seine-et-Oise the number has diminished in five communes and risen in three (It has more than doubled in Montfermeil, passing from 3,035 to 6,208, but this is due to the division into lots of a large property sold as building land). In Seine-et-Marne 25 communes in which the number of plots has fallen are cited, while there are only 16 (among them one town, Coulommiers) in which it has increased. The diminution is attributed to the progress of large farming, and the increase to the growth of the population in the suburbs of Paris.

Going further north, we find the tendency to an increase in the number of plots more marked. In Somme there are 4 communes in which it has diminished and 8 in which it has increased. In Pas-de-Calais M. Girault knows 7 communes in which it has increased and has found none in which it has diminished. The increase is generally very large: at Cucq the number of plots has more than doubled; at Berck it has been multiplied by ten. It is true that there is here case of a seaside place which has developed. The fashion of making a summer stay by the sea has considerably increased the number of parcels all along the coast. In the department of Nord there is also an increase, in many cases considerable. It has a double reason — the development of urban life and the consequent new building, and a very close network of railways.

M. Girault thinks the following final conclusions justified:

(1) Other things being equal, the number of plots increases with the development of town life and the growth of population which entail new building. The number of plots thus increases in the suburbs of towns, on the sea coast and in watering-places which attract tourists and summer visitors. But this cause for the increase of the number of plots has no significance from the agricultural point of view.

(2). The development of ways of communication is a cause of the multiplication of plots which there is nothing to counterbalance. Railways, in particular, are at the origin of many plots. They cut diagonally across many plots, leaving two small triangles where once there was one rectangular plot. In this way the number of plots on the course of a railway is doubled. In France 14,452 communes are crossed by a railway: hence the appearance of several million new plots. But this increase of plots is in no way disquieting from the agricultural point of view.

The plots following on these various causes must be abstracted, and only those increases and diminutions in the number of plots which are due to the action of landowners must be taken into account. As regards this point, it seems as though the tendency to diminution predominated where the number of plots is above the average (2.36 to the hectare), and particularly in the north-east of France (Burgundy, Champagne,

Lorraine). The commune, in which subdivision predominates (the less numerous) most often have less than the average number of plots. It appears therefore, in so far as general conclusions can be drawn from such partial observations, that there is a general, although a far from consistent, tendency to a levelling of the number of plots.

2. THE RAILWAY COMPANIES AND AGRICULTURAL PRODUCTION. — *La Main-d'œuvre agricole* Paris, 25 February 1920.

Certain railway companies have made great efforts to increase agricultural production. The *Compagnie de Chemins de Fer d'Orient* and the *Paris-Lyons-Méditerranée* company have done particularly well in this matter. Their work for agriculture has taken the form of distributing seed and plants, introducing new varieties of plants and holding competitions with a view to developing agricultural machinery and intensifying the use of appropriate manures.

They have not confined themselves to this technical work. Missions made up of agents of the companies and of specially qualified farmers went to study on the spot, either in France or abroad, the market for agricultural produce, live stock, early vegetables, fruit and flowers, and reported on their findings. Following on these journeys, reports were drawn up which dealt with the data of practical interest which should henceforward guide production in the districts concerned. Meanwhile the agents and inspectors of the companies' commercial departments made individual enquiries or were commissioned to make investigations lasting for several months in order to follow the fluctuations of the market for agricultural produce during this time. Numerous pamphlets were circulated among farmers, giving them information by which to direct their production.

Finally, since it would have been difficult to do a really useful and fruitful work among isolated farmers, the companies took the step of constituting selling associations, and especially producing and selling co-operative societies which got into direct touch with French and foreign consumers.

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3. THE EXTENSION OF THE LEGAL POWERS OF AGRICULTURAL SYNDICATES. — Law of 12 March 1920 (*Journal Officiel*, 14 March 1920).

On 12 March 1920 an important law was promulgated which considerably extends the legal powers of trades unions (*syndicats professionnels*). Henceforth trades unions, provided that they do not distribute profits

to their members, may buy for the purpose of hiring or lending to their members, or sharing amongst them, all requisites for the exercise of their trade, and may act gratuitously as intermediaries for the sale of the products resulting exclusively from the personal work or the businesses of the members. They may subsidize co-operative distributive or productive societies, devote part of their funds to the construction of cheap dwellings or to the acquisition of land for allotments, and may make contracts or agreements with other trades unions, societies or undertakings.

In this matter, the law carries out the desire which has long been expressed by the various groups of trades unions and notably by the most numerous amongst them, the agricultural syndicates, the position of which is regularized by the law.

The law further gives to the federations of trades unions, which had no legal existence and had neither the right to possess goods nor to sue and be sued, all the rights which trades unions have hitherto enjoyed or which have been conferred upon them by the new law. At the same time the law gives to trades unions and their federations an important privilege; it exempts from distraint the buildings and fixtures and the moveable property required for their meetings. Their libraries or their courses of technical instruction, as well as the funds of their special institutions for mutual aid and for pensions.

In the third place, the law regulates the question of the managers of trades unions who have been obliged to abandon their trade in order to take up this position, a question which gave rise to vexatious discussions. Henceforth persons who have carried on their trade for at least a year will be able to continue to belong to trades unions and, consequently, to act as managers.

Finally the law recognizes the trade marks or labels used by the trades unions and protects them against being counterfeited or fraudulently used.

REGENCY OF TUNIS.

ASSIGNMENT OF SMALL SETTLEMENT LOTS TO PROFESSIONAL FARMERS MEN DISABLED IN THE WAR AND REFUGEES WHO HAVE SUFFERED BY THE INVASION. — *La main d'œuvre agricole*, Paris, 25 January 1920.

When the allotments annually sold were made, the General Direction of Agriculture, Trade and Colonization reserved around the villages formed a certain area of good land, easily worked, which will be divided into lots of from 60 to 70 hectares. The lots will be granted to men partially disabled in the war or persons who have been ruined by the invasion, if they are professional farmers and have a family of at least four members.

The grantees have precedence in the following order:

(1) Former soldiers and sailors, whether immigrants or not, who

have a right to disablement pensions paid by the State for wounds received or infirmities contracted during the war, the wounded having priority.

(2) Inhabitants of the invaded districts who have been ruined by the invasion.

The administration will examine with particular attention applications from immigrants who belong to one of these categories and come from the same district.

The lots are intended for professional farmers with very small means, and the grants will therefore take the form of leases at low rents.

These leases will be for five years.

During their term the grantees will pay an annual sum based not on the total sale price fixed for the lot but on the part of such price which corresponds to the area brought under cultivation.

When the term expires, or earlier if the value of the land has been earlier realized, a definite deed of sale will be made between the State Domain and the grantee, the price of the land being that fixed when the original grant was made. This price will be payable in 15 annual instalments, of which the 5 first will be $\frac{1}{30}$ of the price, the 5 next $\frac{2}{15}$ and the last $\frac{1}{10}$. The term allowed for total payment of the price may never exceed 20 years, including the time for which the grantee is held to be lessee.

In order to allow the colonists to start in good conditions, the administration has made a financial arrangement based on placing at the disposal of a credit establishment an endowment taken from special resources. This has made it possible to secure that the colonists, as they are installed, will be able to have credits opened for them at the rate of 2 per cent. and up to the maximum sum of 12,000 francs.

This credit will be granted in successive instalments, as gradually work advances and stock and material are delivered. The loans will be made on the authority of the General Director of Agriculture, Trade and Colonization, and on presentation of the minutes taken by the agents of the administration to show how funds are employed.

The terms on which loans will be amortized will be fixed when the credit is opened, and will be such that it will be possible to defer the payment of the first annual instalment until the end of the third year after the loan has been received. The time allowed for repayment may however never exceed the time allowed for paying off the sale price, and the borrower may not be more than 60 years old when he pays his last annual instalment.

The applicant for a lot must prove that he possesses at least 5,000 francs in cash, stock, material, etc.

ROUMANIA.

THE NEW ORGANIZATION OF AGRICULTURAL SERVICES IN THE FORMER KINGDOM. — *Correspondance économique*, Bucharest, December 1919.

In order to ensure the execution of the agrarian reform, the agricultural services of departments were reformed by a decree of 26 November 1919.

At the head of the agricultural and economic administration of each department an agricultural adviser is placed. He represents the Ministry of Agriculture and the State Domains and is under the immediate control of the general directorate of the Central Bank of Co-operation. This adviser decides all questions connected with current administration, and proposes and submits for approval questions on which the Central Bank must pronounce. He directs and superintends the staff of the service, to which he can delegate all kinds of work and which he can entrust with duties. He centralizes all the statistical work and data of the department, in which he makes tours of inspection as often as is necessary.

An inspector who is an agricultural expert is subordinate to him and is especially responsible for the organization, inspection and direction of the market-gardening and farming associations, committees and co-operative societies in the department.

Finally, a district agricultural expert is resident in every district of the department and is responsible for directing, inspecting and supervising the whole management of the leasing associations and committees formed on the expropriated estates, as well as the old and new leasing and purchasing associations on these estates, and of the farming and market-gardening co-operative societies in the district.

SOUTH AFRICA.

LAND SETTLEMENT IN THE PROTECTORATE OF SOUTH-WEST AFRICA. — *The Farmers' Weekly*, Vol. XVIII, No. 447. Bloemfontein, 1 october 1919.

Section 4 of the Treaty of Peace and South-West Africa Mandate Act, gazetted in 1919, contains the following provisions as to land in the Protectorate of South-West Africa, which bring this territory into the land-system of the South African Union :

" (1) It shall be lawful for the Governor-General by proclamation to apply to the said territory, with such modifications as he may deem necessary having regard to the conditions obtaining therein, the provisions of all or any of the following laws to wit : the Land Settlement Act 1912, the Land Settlement Amendment Act 1917, the Crown Land Disposal Ordinance 1903 of the Transvaal, and the Crown Land Disposal Amendment Ordinance 1906 of the Transvaal (1).

" (2) Save for the provisions of sub-section (1) of this section, no grant of any title, right or interest in State land or minerals within the said territory or of any right or interest in or over the territorial waters thereof shall be made and no trading or other concessions shall be granted without the authority of Parliament.

" (3) No land within the said territory now or hereafter set apart as

(1) For all this legislation see the articles on land tenure and land settlement in our issues for April 1915 and August 1918.

a reserve for natives or coloured persons shall be alienated save under the authority of Parliament: Provided that nothing in this section contained shall be deemed to prohibit the Governor-General, in respect of land contained in any such reserve, to grant individual title to any person lawfully occupying and entitled to such land."

UNITED STATES.

1. THE AGRICULTURAL, LEGISLATIVE COMMITTEE OF CALIFORNIA. — *California Fruit News*, Vol. 160, No. 1641. San Francisco, 20 December 1919.

At the suggestion of the Director of the State Department of Agriculture, a farmers' committee has been formed in California to consider questions of legislation affecting agriculture. It will be known as the Agricultural Legislative Committee of California and will consist of representative of the different forms of agricultural production in the State (dairying, stockbreeding, poultry-keeping, fruit-growing, etc.) No State or county official will be eligible for membership of the Committee which will thus be entirely unofficial in character.

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2. HOW CALIFORNIA FARMERS ARE ENCOURAGED TO READ BOOKS. — *Library Journal*, No. 9, New York, September 1919.

In a paper read before the Agricultural Libraries Section of the American Library Association on 26 June 1919, Mr. Milton Ferguson, Librarian of the California State Library, explained the methods adopted in California for placing books at the disposal of farmers. In 43 of the 58 counties into which California is divided, county libraries have been established in accordance with an Act passed by the State Legislature in 1911. These libraries have already accumulated books numbering a million volumes and have established nearly 3,000 branch libraries.

The county librarian travels throughout the county and has many opportunities of coming into contact with farmers and their families. Very often the librarian works in co-operation with the county farm adviser. Not infrequently they travel together and the farm adviser takes with him a bundle of library books which he distributes to the farmers. He knows their needs and places in their hands the books which will be of most immediate value to them. When the farm adviser holds a meeting of farmers he gives the librarian an opportunity of talking to them about books. The librarian also places a collection of technical books in the adviser's office and these are given out to the farmers who ask for special advice on their own problems and difficulties.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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57	SWITZERLAND	IV	M. GEORGES WAGNIÈRE, Minister Plenipotentiary.
58	UNITED STATES	I
59	URUGUAY	V	Dr. R. ROVIRA, Consul.

Secretary General: Prof. CARLO DRAGONI.

*In quoting articles, please mention this REVIEW:
International Review of Agricultural Economics*

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (1; heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933 $\frac{1}{4}$ d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5 $\frac{1}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933 $\frac{1}{4}$ d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feldan Masti (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	18.753 $\frac{1}{4}$ d.	at par
1 Franc (100 centimes) (France)	=	933 $\frac{1}{4}$ d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1193.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	933 $\frac{1}{4}$ d.	at par
1 Leu (100 statinik) (Bulgaria)	=	933 $\frac{1}{4}$ d.	at par
1 Lira (100 centesimi) (Italy)	=	933 $\frac{1}{4}$ d.	at par
1 Litre	=	0.21998	gallons
1 Mark (100 Pfennige) (Germany)	=	0.0275	bushels
1 Mark (100 penni) (Finland)	=	11 $\frac{3}{4}$ d.	at par
1 Metre	=	933 $\frac{1}{4}$ d.	at par
1 Milreis, gold (Brazil)	=	3.28084	feet
1 Milreis, gold (Portugal)	=	28.2 $\frac{1}{16}$ d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	48 $\frac{5}{16}$ d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	933 $\frac{1}{4}$ d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	38.1737 $\frac{1}{4}$ d.	at par
1 Pund (Sweden)	=	188.015 $\frac{1}{16}$ d.	at par
1 Quintal	=	0.93712	lbs.
1 Rouble, gold (100 kopeks) (Russia)	=	1.96843	cwts.
1 Rupee, (16 annas) (British India)	=	28.1 $\frac{3}{8}$ d.	at par
1 Talar (20 piastre) (Egypt)	=	10 of £1 (gold)	
1 Verst (Russia)	=	48.1 $\frac{1}{3}$ d.	at par
1 Yen, gold (2 fun or 100 sen) (Japan)	=	1166.64479	yards
1 Zentner (Germany)	=	28.037 $\frac{1}{4}$ d.	at par
	=	117.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

FINLAND.

THE PRESENT POSITION OF CO-OPERATION.

SOURCES:

ANDELSVARKSAMHIFTEN I FINLAND, 1916, 1917; 1918 PELLERVOS ÅRSBOK XVI; XVII;
XVIII. (*Co-operation in Finland in 1916; in 1917; in 1918. 16th, 17th and 18th Year-
book of the "Pellervo" Society*) Helsingfors, 1919 and 1920

We have already dealt in this Bulletin with the development of co-operation in Finland; the beginnings of the movement and its successive developments up to 1909 were described in our issue for September 1911. Further progress, down to the close of 1914, was the subject of a lengthy study which appeared in the issues for September and October 1915. We now purpose, with the help of the recently published yearbooks of the "Pellervo" society, to set forth the more recent developments of co-operative activity in Finland during the troubled period of war and internal disorders which goes from 1915 to 1918.

§ I. THE MOVEMENT IN GENERAL.

It is advisable to preface a review of the several forms and manifestations of the co-operative movement by a table giving figures which summarise the steady progress achieved since 1901, in which year the first beginnings were made, down to 1918.

TABLE I. — *Development of Finnish Co-operative Societies from 1901 to 1918.*

Date	Co-operative distributive societies	Co-operative dairies	Co-operative credit- societies	Co-operative societies the use of for agri- cultural machinery	Co-operative societies for working peat bogs	Other forms	Total
1901	3	—	—	—	—	—	3
1902	16	28	—	—	1	5	50
1903	66	75	24	3	2	19	189
1904	119	145	37	3	3	36	393
1905	166	225	140	4	7	50	592
1906	263	292	177	15	10	110	867
1907	389	330	240	69	31	201	1,260
1908	497	342	307	127	49	278	1,600
1909	506	354	384	169	70	329	1,812
1910	512	362	416	191	85	363	1,929
1911	506	370	441	201	98	384	2,000
1912	503	389	451	207	110	404	2,064
1913	512	418	476	218	118	425	2,167
1914	517	436	512	235	127	473	2,300
1915	539	454	603	251	141	529	2,517
1916	601	468	666	275	153	570	2,733
1917	664	493	702	292	167	605	2,923
1918	689	494	708	295	172	633	2,991

It should be noted that these data, as also those to which we shall refer later on, embrace all forms of co-operation and not only agricultural co-operation; but it should be borne in mind that, at the close of 1917, 84.2 % of the population of Finland belonged to the agricultural classes, and that only a relatively small percentage of the co-operative organisations were in urban centres. The prevalently agricultural character of Finnish cooperation is clearly shown by Table II (page 305).

With this as a preliminary statement, we will now examine the development of the several forms of co-operative activity during the last years, taking first of all the work performed by the "Pellervo" society for developing and co-ordinating the several initiatives, then the results attained in the several branches, and lastly the central organisations.

§ 2. THE "PELLERVO" SOCIETY.

A. The Reorganisation of the Society.

An event of the highest importance in the life of this Society, which has from the start been the heart and soul of the co-operative movement

TABLE II. — *Distribution of Finnish Co-operative Societies between Rural and Urban Centres.*

Date	Co-operative organisations in rural districts		Co-operative organisations in urban centres		Number of co-operative societies of all kinds for each 10,000 inhabitants	Co-operative dairy societies, co-operative credit societies, co-operative societies for the use of agricultural machinery & co-operative societies for working peat bogs for each 10,000 inhabitants in rural districts
	Number	% of total number of co-operative societies	Number	% of total number of co-operative societies		
30 Sept. 1904.	297	87	44	13	1.2	0.8
30 June 1905.	451	90	52	10	1.8	1.3
30 April 1906.	576	88	78	12	2.3	1.6
31 May 1907.	880	87	136	13	3.6	2.3
31 May 1908.	1,201	85	214	15	4.9	3.0
31 Aug. 1909.	1,542	87	233	13	6.1	3.7
31 Dec. 1910.	1,698	88	231	12	6.4	4.1
31 Dec. 1911.	1,766	88	234	12	6.5	4.3
31 Dec. 1912.	1,826	88	238	12	6.6	4.4
31 Dec. 1913.	1,917	88	250	12	6.9	4.6
31 Dec. 1914.	2,040	89	260	11	7.3	4.9
31 Dec. 1915.	2,248	89	269	11	7.8	5.3
31 Dec. 1916.	2,440	89	294	11	8.4	5.6
31 Dec. 1917.	2,605	89	318	11	8.7	5.8
31 Dec. 1918.	2,664	89	327	11	9.0	6.0

in Finland, has recently taken place. It has been reorganised on the basis of a real federation of co-operative societies. As far back as 1914 the annual members' meeting approved a new set of articles of association which aimed at bringing about this transformation; but the opposition of the Senate to its ratification prevented the reform from being carried out. After the revolution of March 1917 the obstacles seemed to be removed and the directors once more examined the question of reorganization and appointed a Commission to revise the proposed articles of association drawn up in 1914. The new draft was at last approved by the Board of Directors on 5 December 1917, and a special members' meeting was called for 2 February 1918, to consider the matter. Internal disorders made it impossible to hold this meeting before 28 June; the proposed reform was then sanctioned and ratified a few days later, on 4 July, by the Senate. On 12 July the directors were elected under the new rules which modify considerably the nature of the Society.

The following are the main points in the new articles of association. The objects of the Society are to promote the economic development of

the people by means of co-operation and to bring about the federal co-ordination of the several co-operative efforts in the country (Art. 2). Central co-operative societies and local co-operative societies may belong to the Society. Central societies, whose field of action covers the entire country, pay an annual quota of 5,000 marks; the other centrals and the local societies pay an annual quota of 20 marks if their annual turnover does not exceed 200,000 marks, of 50 marks if the turnover is from 200,000 to 500,000 marks, of 100 marks if the turnover is from 500,000 to 1,000,000 marks, with an additional 100 marks for each extra million marks of business, up to a maximum quota of 1,000 marks for the local societies and 2,000 marks for the centrals, should the turnover exceed 1,000,000 marks. The management of the Society is entrusted to a Board of Directors and an Administrative Council. The Board of Directors consists of 9 members, appointed in part by the centrals which do business throughout the country, to the number of one for each central, the remaining members being designated by the annual members' meeting; in addition, each central elects a substitute and three substitutes are elected by the annual meeting. The Board of Directors is appointed for a period of three years and attends to all matters which are not within the specific competence of the Administrative Council. The Administrative Council consists of the members of the Board of Directors and of nine other members, with a like number of substitutes, elected by the annual members' meeting for a period of three years. One third of the membership is renewed each year. In selecting them, an effort is made to secure, as far as possible, the proportionate representation of the several sections of the country and of the several kinds of co-operative societies. It is the duty of the Administrative Council to give instructions on all matters dealing with the activities of the Society in the field of education and co-operative propaganda, and to come to decisions as to new enterprises of importance, and alterations in the modes of social activity. The annual members' meeting is held at the end of April, summoned by the Board of Directors, to approve the accounts and estimates, to make appointments to vacant positions, and to decide all questions submitted to its judgement. Special meetings may also be called if the Board of Directors or Administrative Council deem it advisable, or on the written request of at least twenty member societies.

The fundamental feature of the reform consists in the fact that individuals are no longer admitted as members, and so, gradually, as the individual members now belonging to the Society die off, the "Pellervo" will assume, formally as well as substantially, the character of a real federation of co-operative societies.

B. The Members.

The membership during the last three years is as shown in Table III (page 307).

This shows that the number of individual members is decreasing, while the number of affiliated societies grows. The ratio of the co-opera-

TABLE III. — *Membership.*

Description	1916	1917	1918
Co-operative societies	336	340	372
Including <i>Co-operative distributive societies</i> . . .	60	60	76
<i>Co-operative dairies</i>	103	105	116
<i>Co-operative credit societies</i>	167	170	176
Miscellaneous societies and associations	89	91	92
Individual members	939	934	904
Total . . .	1,364	1,365	1,368

tive societies belonging to the "Pellervo" to the number of registered co-operative societies during the last years is as follows:—

	1916	1917	1918
Co-operative societies in general . .	12.2 %	11.6 %	12.5 %
Co-operative distributive societies . .	9.8 %	9.0 %	11.1 %
Co-operative dairies	21.9 %	21.4 %	23.6 %
Co-operative credit societies.	25.1 %	24.2 %	24.9 %

Although the ratio is increasing, in 1918 it is still small; but it is believed that the new organisation of the society will tend to hasten the affiliation of a larger number of co-operative societies to the "Pellervo."

C. *Financial Resources.*

The financial resources available for the "Pellervo" have grown considerably of recent years. They consist of (a) a State subsidy, (b) members' subscriptions; (c) special contributions from central societies; (d) funds obtained by the sale of publications, (e) income derived from work in the field of forestry, and from the offices opened for legal and electro-technical advice, (f) other miscellaneous sources.

The State subsidy which has grown from 20,000 marks in 1899 to 87,000 marks in 1911, when it attained its maximum, was reduced to 55,300 marks in 1916, somewhat increased in 1917, and still more so in

1918. The following table shows the sums received from this source during the past five years.

	1914	1915	1916	1917	1918
	(thousands of marks)				
For the general expenses of the Society	54,000	48,000	45,000	45,000	63,900
For instructing co-operative dairies in accountancy and management, for the publication of statistics of co-operative dairies, and for investigations into dairy economics	10,000	7,000	4,000	4,800	4,800
For co-operative instruction in forestry	7,000	6,300	6,300	6,300	6,300
Salary of an expert on co-operation in the district of Vleaborg	3,000	—	—	—	—
Total . . .	74,000	61,300	55,300	56,100	75,000

The special contributions made to the "Pellervo" by the central co-operative societies have increased considerably from year to year, the total amount rising from 9,635 marks in 1913 to 120,260 in 1918. The financial support granted by the centrals for 1919 was estimated at 145,000 marks. The contributions for the last three years were as follows:

	1916	1917	1918
	(marks)		
Central co-operative society for agricultural purchases "Hankija"	16,591	29,000	45,260
Central Credit Institute of the rural co-operative banks	8,600	10,000	10,000
Union of the co-operative distributive societies	2,000	8,000	25,000
Central co-operative society for the exportation of butter "Valio"	16,200	27,500	40,000
Total . . .	43,391	74,500	120,260

As a whole, the financial resources available for the "Pellervo" have more than doubled in the last five years, as can be seen from the following table in which we give the data for the society's receipts, subdivided according to the several chapters, from the year of its foundation until the end of 1918.

TABLE IV. — *Receipts of the "Pellervo" from 1899 to 1918*

Year	State subsidy	Special Con- tributions from centrals and other bodies	Contri- butions and donations from members	Gross receipts from sale of publica- tions	Other receipts	Total
1899-1900	20,000	—	25,610	31,095	390	77,095
1901	20,000	—	14,160	31,404	439	66,003
1902	24,000	—	7,960	33,253	574	65,787
1903	26,000	35,000	38,345	40,700	844	100,389
1904	38,000	7,000	8,187	51,671	767	105,625
1905	60,000	2,000	5,795	48,610	1,185	117,590
1906	62,000	2,000	11,340	55,330	1,040	131,710
1907	76,667	2,000	6,745	66,735	4,536	156,683
1908	71,000	2,000	6,995	59,103	813	139,911
1909	81,000	7,300	5,905	73,545	569	168,319
1910	81,500	9,600	35,445	78,868	1,616	207,029
1911	87,000	9,600	5,406	89,870	1,155	193,031
1912	81,000	9,975	6,330	117,286	2,025	217,216
1913	74,500	9,635	6,735	118,407	11,803	221,080
1914	74,000	15,400	5,572	131,776	18,136	244,884
1915	61,300	21,300	6,815	145,175	13,996	248,946
1916	55,300	48,401	7,305	180,456	22,496	314,048
1917	56,100	74,500	6,130	230,630	100,095	467,455
1918	75,000	120,260	5,530	274,574	68,071	543,435

D. *Work of the Society.*

In spite of the economic difficulties which beset the country, first as a result of the war, and then of the political revolutions, the "Pellervo" has steadily carried on its beneficent labours. We will briefly summarise the work it has accomplished in its several spheres of activity, classifying it into (a) efforts to promote the co-operative movement in general; (b) efforts to promote the development of special forms of local co-operation; (c) efforts in connection with co-operative centralisation.

(a) *Efforts to Promote the Co-operative Movement in General.*

1. *Publications.* — The work of propaganda and co-operative education which the Society has carried on through the press finds its chief exponent in the periodical publication "Pellervo" issues in two Finnish editions (one larger, the other summarised) and in a Swedish edition.

The following figures show the number of copies printed and the circulation attained by this review.

Years	Finnish Editions		Swedish	Total
	Larger	Smaller	Edition	
1905	19,884	—	3,155	23,039
1910	30,339	—	2,228	32,567
1913	40,121	—	2,617	42,738
1914	46,675	—	3,420	50,095
1915	49,580	—	3,204	52,784
1916	49,141	4,436	3,832	57,409
1917	47,753	4,163	2,748	56,664
1918	38,759	1,497	2,508	42,764

As we see, there has been a falling off in the last years, due to the political situation then prevailing in the country.

The Society has also undertaken, with the help of the central co-operative societies, the publication of another monthly periodical in Finnish, the "Suomen Osuustoimintalehti", of a Yearbook of the Society, the "Pellervos Årsbok", of an annual almanach, the "Pellervon Kalenteri" with a circulation of from 40,000 to 60,000 copies, and of various co-operative tracts belonging to the "Pellervo Library."

2. *Co-operative Education.* — The Society still maintains, with the help of the central co-operative societies, the "Andelsinstitut" (Institute for Co-operation) which suffered from the political situation and was only able partially to carry out its programme in 1917 and 1918. Whereas, in previous years, the general course of instruction in co-operation had been supplemented by special course of lectures for co-operative distributive societies, co-operative dairies, co-operative credit banks, and by brief local courses, during the last two years it has only been possible to hold the special course on co-operative distributive societies, and no local courses could be held.

The following figures show the attendance at the several courses year by year.

Year	Co-operative distributive societies	Co-operative dairies	Co-operative credit	Total
1909	42	21	46	109
1910	25	12	23	60
1911	16	7	28	51
1912	21	15	31	67
1913	34	43	30	107
1914	33	—	32	65

Year	Co-operative distributive societies	Co-operative dairies	Co-operative credit	Total
—	—	—	—	—
1915	36	34	35	105
1916	40	11	22	73
1917	42	—	—	42
1918	44	—	—	44
Total . . .	333	143	247	723

3. *Work of Supervision and Assistance.* — One of the chief activities of the "Pellervo" consists in the supervision and assistance which it affords through its officials to safeguard the working of co-operative societies. We will deal later with this work as it affects the several forms of co-operation, and here we will only give the number of services of this kind rendered by the Society from 1900 to 1918, and the number rendered to the co-operative movement as a whole apart from special branches:

Year	Supervision and assistance of all kinds	Services rendered to the co-operative movement as a whole	Percentage of these latter to total services rendered
—	—	—	—
1900	252	147	58
1901	142	77	54
1902	286	69	24
1903	489	100	20
1904	529	41	9
1905	536	32	5.8
1906	1,008	105	19.5
1907	761	36	4.6
1908	743	50	6.7
1909	647	42	6.3
1910	776	47	5.8
1911	860	25	2.9
1912	694	35	5
1913	884	89	12.4
1914	1,146	166	14.7
1915	1,045	123	11
1916	1,238	187	14.3
1917	1,055	66	6.3
1918	426	22	5.3

(b) *Efforts to Promote the Development of Special Forms of Local Co-operation.*

I. *Cooperative Purchasing or Distributive Societies.* — The "Pellervo" undertakes the drafting of model articles of association for this kind of society in Finnish and in Swedish; in 1918 it published a new edition in

both languages. It is also publishing a new and revised edition of the Handbook for Co-operative Purchasing or Distributive Societies (*Handbok för handelslag*) and has reprinted two propaganda leaflets to spread the idea of this form of co-operation, "Mitä hyötyä on osuuskaupasta?" and "Kaksitoista neuvoa osuuskaupan perustajille".

The "Pellervo" in its efforts to direct co-operative purchasing or distributive societies along sound lines of management which will ensure their success, afforded advice through its officials in 131 instances in 1916 (74 times to newly organised societies and 57 times to societies already working), in 116 instances in 1917 (48 times to newly organized societies and 68 to societies already working), and in 79 instance in 1918 (14 times to new societies and 65 times to societies already working).

2. *Co-operative dairies.* — In recent years new and revised editions, in Finnish and Swedish, of model articles of association for such societies have been published. The "Pellervo" has also undertaken to draw up annual statistics of dairy societies and to publish them; it has printed propaganda leaflets, amongst which "Mitä hyötyä om osuusmeijeristä?" (*What advantages does the co-operative dairy offer?*) and "Miten osuusmeijeriä perustettaessa on meneteltävä?" (*How to proceed in organising a co-operative dairy*); it has drawn up a series of forms to be used by the organisations in keeping their accounts. The society has not failed to support the interests of co-operative dairies in government circles, drawing up timely resolutions with regard to government policy in the matter of prices and exports, and it has assisted the Central Society "Valio" during the difficult period consequent on internal troubles and the pillaging of the depots in 1917. It has kept in close touch with the federation of co-operative dairies. Its officials afforded advice and supervision in 301 cases in 1916 (on 276 occasions to dairies already working and on 25 occasions to societies in process of organisation), in 146 cases in 1917 (137 and 9 respectively) in 88 cases in 1918 (87 and 1 respectively). The "Pellervo" has also carried out important investigations on various problems connected with the work and management of co-operative dairies and on the results of the several technical systems used by them.

3. *Co-operative credit societies.* — The "Pellervo" has also drafted model articles of association for these societies, has published propaganda leaflets and forms for accountancy and management purposes. The consultations and inspections carried out in this field by its officials numbered 447 in 1916, of which 133 in connection with the foundation of new societies, and 314 for societies already working, 393 in 1917 (98 and 295) and 164 in 1918 (1 and 163).

4. *Other forms of co-operative societies.* — Of recent years the "Pellervo" has published new model articles of association for co-operative purchase and sale societies, for co-operative societies for the sale of livestock, for threshing grain, for selling eggs, etc. It has printed and distributed propaganda leaflets among which "Mitä hyötyä on paimakoneosuuksunnasta" (*The advantages of co-operation for the use of threshing machines*),

and "Neuvoja puimakoneosustuskunnan perustajille" (*Advice on the formation of co-operative societies for the use of threshing machines*), and it has prepared similar publications for the co-operative societies for the sale of eggs, the working of forests, etc. It has made investigation into several subjects of importance to special branches of co-operation; for instance, in 1916 it inquired into the mode of cash settlements for purchases made in common as a result of collaboration between co-operative distributive and co-operative credit societies, and into the working of co-operative societies for the sale of livestock, etc.; in 1917 it inquired into the condition of the woods owned by the communes, into the development of co-operation for land purchase, and collected statistics on the activities of co-operative societies for the use of threshing machines and for the sale of eggs, etc.

In the work of advising and supervising various forms of co-operation which do not belong to the three main branches which we have considered, the officials of the "Pellervo" acted in 182 cases in 1916, in 334 in 1917, and in 73 in 1918.

(c) *Efforts in connection with Co-operative Centralisation.*

In this field we can point to two initiatives taken by the "Pellervo" in these last years, one for the centralisation of local mutual societies for fire insurance, and the other for the creation of a central association of co-operative societies for the sale of livestock.

Ever since 1915 the Society had taken up the first matter, referring it for study to a special committee. After a series of meetings and enquiries it came to the conclusion that a new institution for re-insurance was essential, which should work throughout the country, and whose duty it should be to establish, guide, and direct local fire insurance societies, to provide for their needs, and to undertake the re-insurance of their risks and at the same time to act as their central organ for all purposes and not only for reinsurance. This decision was transmitted in Finnish to all district and parish societies for fire insurance, inviting them to send representatives to a meeting called at Helsingfors on 22 April 1917 to decide on the matter. The representatives of 39 local fire-insurance societies attended the meeting and 5 societies signified their assent by writing: the insured capital of these 44 organisations amounted, at the close of 1914, to 238 million marks. After an animated debate it was agreed to establish an Institute for Reinsurance and to provide at once the necessary means toward this end. The committee entrusted with the drafting of articles of association for the new organisation rapidly completed its task, forwarding the draft to the several societies with a request that they send comments and criticism. Subsequently the final articles of association for the "Vakava Reinsurance Society" were drawn up and submitted to the Senate for ratification on 29 May, and approved by that body on the ensuing 18 July.

The co-operative societies for the sale of livestock, of which many

have been organised in recent years, acquiring economic strength after securing the monopoly of trade in meat and cattle, decided to form a central in 1917. On 15 January 1918 a letter was sent to the "Pellervo" asking its advice in the matter. The "Pellervo" in its reply, dated 17 May, expressed doubts for the time being as to the advisability of the step proposed as it would be better to secure first a more satisfactory organisation of these societies on a truly cooperative basis. In spite of this, the central was organised under the name of "Finlands Kreaturscentrallag m. b. t."

(To be continued).

PORTUGAL.

THE MOST RECENT PROVISIONS REGARDING CO-OPERATIVE AGRICULTURAL CREDIT.

SOURCES (OFFICIAL):

DECRETO Nº 4.022 INSERINDO VÁRIAS DISPOSIÇÕES RELATIVAS A CONSTITUIÇÃO DAS SOCIEDADES COOPERATIVAS AGRÍCOLAS E DE SEGURO MUTUO-AGRÍCOLA E PECUARIO E AO DESENVOLVIMENTO DE TODOS OS MEIOS DE INTENSIFICAÇÃO DA PRODUÇÃO AGRÍCOLA (29 de Março de 1918), — *Diário do Governo*, Lisbon, 1 April 1918.

DECRETO Nº 5.219 APROVANDO AS PARTES Iª E IIª DO REGULAMENTO DO CRÉDITO E DAS INSTITUIÇÕES SOCIAIS AGRÍCOLAS, REFERENTES AO CRÉDITO AGRÍCOLA MUTUO E AOS SINDICATOS AGRÍCOLAS E DE PECUARIA E SUAS UNIÕES (18 de janeiro de 1919). — *Diário do Governo*, Lisbon, 8 March 1919.

DECRETO Nº 1729 MANDANDO PUBLICAR AS INSTRUÇÕES E MODELOS DE ESTATUTOS PARA A ORGANIZAÇÃO DAS CAIXAS DE CRÉDITO AGRÍCOLA MUTUO, ANEXAS A MESMA PORTARIA (27 de Fevereiro de 1919). — *Diário do Governo*, Lisbon, 3 April 1919.

In previous issues we have traced the development of co-operation in Portugal as regards agricultural credit from the institution of the earliest forms of organisation, the *Misericórdias* and the *Celleiros* — which though not true co-operative societies, might be considered as such, both because of their aims and of their special form of constitution — to the creation of mutual agricultural credit banks organised under the law of 2 March 1911, which are of the nature and character of true co-operative societies.

The above-mentioned law, conceived in a truly modern spirit, met with many difficulties in application, chiefly owing to the great hesitation with which the rural population received the innovations which it intro-

duced. Another decree, therefore, dated 30 June 1914, while conforming in its general outlines to the previous decree, contained new provisions intended to facilitate the development of agricultural credit through the medium of the co-operative banks. But as these provisions were not considered sufficient, a new decree was issued, dated 29 March 1918, completing the previous decree, and with additional clauses calculated to extend the sphere of action of the mutual banks and to foster more and more the agricultural development of Portugal.

This decree not only modifies in some respects the preceding legislation, but regulates with greater precision the whole organisation of agricultural credit in Portugal. Those provisions are of special importance by which legal existence is given to the agricultural associations which may become members of the banks, and so also are the clauses respecting security for loans, insurance of the pledges given and the relations between banks and the associations which become members of them, determining the attributes, functions and duties of such associations.

The provisions of these decrees have since been completed by ample regulations contained in Decree No. 5219 (of January 1919) and by instructions issued in another decree dated 27 February 1919, intended to popularise the rules contained in the preceding decrees and in the regulations. To these instructions are appended model rules for banks of the three different types already described by us, viz. banks with unlimited liability, with limited liability, and banks of a mixed character.

§ I. CHARACTERISTICS OF AGRICULTURAL ASSOCIATIONS TO WHICH BANKS MAY GRANT LOANS.

The Decree of January 1919 concerns the legal status of the agricultural associations to which banks may grant loans. These associations, which, according to Art. 1 of Law 215 (30 June 1914) comprise agricultural syndicates and trade associations to which belong only agriculturists or persons working at trades connected with agriculture, are according to the new decree to be considered as true co-operative societies, the number of their members being unlimited, and their objects being the same as those of agricultural co-operation as to labour, production, transformation, and disposal of produce belonging to members and as to mutual agricultural insurance.

These associations may be enrolled as members of mutual agricultural credit banks and may therefore benefit by contracting loans but only on condition that they neither receive nor have a right to special subsidies from the State, and that their rules forbid the allocation of more than 5 per cent of their profits to the payment of interest on capital, the remainder being employed for the collective benefit of the association, or for promoting, by instruction or propaganda, improved agricultural methods adapted to the district in which they work.

To the constitution of these co-operative societies are extended all

the provisions which by Law No. 215 (30 June 1914) had been laid down respecting the constitution of mutual agricultural credit banks.

In determining the functions and the sphere of action of every agricultural co-operative or mutual insurance society, the Decree wisely enacts that the special conditions of the district in which the society is to be instituted must be taken into account, so as to facilitate the attainment of its objects.

As in the case of mutual agricultural credit banks, it is permitted both to establish branches or agencies of any association within its sphere of operations, and to form unions, groups or federations of similar associations to be constituted and to work under the same conditions as the local associations.

Agricultural co-operative societies and mutual insurance societies have legal existence and enjoy all the fiscal exemptions accorded to the mutual agricultural credit banks provided that they are members of such banks. If they work without having obtained official approval of their rules they shall be dissolved according to the method laid down for the agricultural credit banks.

Also in the case of differences arising between the members and the governing bodies of the agricultural syndicates, the agricultural co-operative societies and mutual insurance societies and for the compulsory repayment of sums lent to members by the above mentioned bodies, the same rules must be observed which have already been laid down for the mutual agricultural credit banks.

§ 2. OBJECTS AND LIMITS OF LOANS.

According to the Law of 30 June 1914, No. 215, the maximum sum which the credit banks could advance to an agriculturist to enable him to repay a mortgage debt on which the interest exceeded 6 per cent, was 5,000 francs. The Decree of 1918, in view of the increased value of land, and with the object of extending credit transactions raised the maximum to 15,000 francs. Besides this, the decree under consideration has not only defined more clearly the operations which banks may effect with agricultural associations, but has amply extended the field of these operations, declaring that loans may always be accorded to such associations, when the borrowed capital is to be devoted (1) to the purchase of manures, plants, seed, insecticides, spraying materials, machines, implements, vaccine, serum for the treatment of cattle, provided that every thing is intended to be supplied to members, for experiments in agriculture or cattle-raising, or for other technical agricultural purposes for the associations themselves; (2) to the acquisition of agricultural produce, for the purpose of transformation or improvement or of any material which by special treatment can be advantageously utilized in agricultural and cattle-raising experiments; (3) to the purchase, the construction, or the renting of buildings to serve as factories or workshops for purposes connected with agriculture, to the acqui-

sition or renting of land for agricultural stock-farming undertakings which are included within the scope of the institution, and for the cost of works which contribute to the improvement of land.

The Regulations of 8 January 1919 also lay down that applications for loans must specify precisely the manner in which the money applying for it is to be employed by the member.

§ 3. SECURITY FOR LOANS.

The clauses of the regulations which deal with the security for loans are of special importance. Such security is furnished by pledging real property, chattels (of which the bank must fix the value), shares, bonds or other securities.

The regulations also provide that if the articles pledged are marketable goods or are susceptible of improvement and thus of being made more valuable and more easily disposed of, the sale of them shall be preferably entrusted to the agricultural syndicate of the district, to some other competent agricultural association, to a co-operative agricultural association, to some establishment belonging to the State, or to private individuals, the bank as creditor having been previously informed, but the borrower shall remain the guardian of the pledge until the complete liquidation of the debt.

With regard to mortgage security, the Regulations lay down that it can be accepted only in the case of real property which is capable of being sold and yields secure and continuous returns, of an amount approximately determined.

The Law of 29 March 1918 has special clauses respecting all that concerns the insurance of the articles pledged as security for loans and of the income assigned for the same purpose. With regard to this, the law declares that where mutual agricultural insurance societies are established which, though not subject to the law regulating mutual agricultural credit banks, yet are legally constituted, the directors of the bank have power to determine the conditions of insurance of property given in pledge. In the case that within the sphere of action of a mutual agricultural credit bank there exists a mutual insurance society, working in accordance with the law that regulates such banks, the new decree provides that the insurance of property and of income forming the guarantee of the loan shall preferably be effected by such associations. This preference becomes compulsory when the property is agricultural or the income is derived from agricultural sources.

It should be observed that the value of the objects which constitute the security and of the income to be assigned as guarantee, must be determined by the directors of the bank, and must not exceed the sum for which such objects or income have been insured.

The Regulations also contains provisions concerning the insurance of the objects pledged.

Thus if the security should consist of cattle, the directors of the bank

must refuse a loan which is applied for without the cattle having been duly insured.

Again, in the case of certain kinds of agricultural produce already stored, the bank may require the insurance of such produce for the whole time during which it must remain in the warehouses or stores, and may demand that it should be kept under proper care till the liquidation of the loan. But when the security consists of agricultural or forest produce already gathered in but not stored, the credit bank, taking into account the quality of the produce and the condition of the place where it is kept, must exact a moderate insurance, and require from the borrower such arrangements as will secure it from waste and destruction.

There are also provisions regarding the discounting of *warrants* issued on agricultural produce stored in general warehouses, also regarding the form of contract to be adopted for loans against the assignment of income, leases, real or other property, establishing that when the securities assigned are derived from agriculture, they must be insured against those risks which occur frequently in the district where the agriculture is carried on. Insurance against fire is always obligatory in the case of rural property.

According to the Regulations a loan contract of mutual agricultural credit guaranteed by a pledge gives to the bank, in case of loss or damage, the right to demand directly from the insurance society the compensation payable.

In order that the bank may have power to exact payment of the loan before it falls due, in the case of a guarantee which has diminished in value, the Regulations, while confirming the rules laid down by preceding laws, add that the term of the loan may be considered to have expired, and repayment may be exacted immediately, when from any cause whatever the insurance of the objects or income which form the guarantee has lost its value, or when the insurance itself has not been taken out by the debtor within the term fixed by the loan contract.

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By these new provisions all the important legislation in Portugal on the subject of agricultural credit is completed and brought into harmony.

This legislation first regulated by means of decrees already described by us in this Bulletin (1) the mutual agricultural credit banks properly so called, and later regulated the agricultural syndicates and associations, organisations which are closely connected with one another, in such a way as to enable them to carry out a work of greater utility, this being the primary object of the law.

(1) See our issues of October-November 1910; May 1912; October 1913; April 1915

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

ARGENTINA.

THE WORK OF THE AGRICULTURAL LEAGUE IN 1919 — *Revista de la Liga Agraria*, Buenos-Ayres, September and December 1919

The Agricultural League is a national Argentine association, the object of which is to encourage by every means the extension of agriculture and of stock-farming. The report sent in by its Vice-President, on the occasion of its twenty-sixth meeting, explains the principal questions under consideration by the committee of management in 1919.

The first work of the association was to request that the Ministry of Agriculture would take energetic measures for the better management of the woods, and for the construction, already partly effected, of branch lines of railway, which, by facilitating communication, might give a rapid impulse to the agricultural industries of the country. In order to ascertain clearly and with certainty the capability of every district as regards stock-farming, the Committee proposed that a special chart should be made, showing the conditions of climate, the production of fodder and all that might elucidate the present conditions and serve as a guide for the measures to be adopted in future.

Of particular importance were the reports presented by the association through its delegates in the last economic and industrial congresses held in Argentina. These were the Economic Conference, the Congress on the Milk Industry, and the Congress on Co-operation.

The principal subjects under consideration at the Economic Conference were the following:

(1) Method of reduction of the rate of interest, on the national mortgage bonds, as well as the rate of discount of the *Banco de la Nación*.

(2) Reforms of the fiscal system, whether by the abatement of custom-house duties on importation, or suppression of duties on exportation, and the imposition of a tax on revenue;

(3) Legal recognition of contracts relating to land-holding;

(4) Stock-farming problems, concerning agricultural and pastoral districts, geographical charts showing pastoral conditions, the markets for meat, the principal causes of loss among cattle, etc.

The most important subjects discussed at the Congress on the Milk Industry were the following:

(1) The establishment in primary schools in the country of a practical course on the milk industry ;

(2) Improvements and sanitary measures relative to cow-houses in the country ;

(3) Facilitation of the establishment of model holdings through exemption from taxes.

We now enumerate the principal subjects brought forward and discussed at the Congress on Co-operation, subjects of special importance, considering the necessity for the development of co-operation in the Argentine. These are :

(1) The development of agricultural co-operative societies under the various forms of societies for distribution, production, credit, assistance and thrift :

(2) Federation of co-operative societies into syndicates, and the spread of such federations.

This Congress was also specially interested in the creation of particular forms of co-operation for the insurance of cattle and agricultural produce.

GERMANY.

1. CO-OPERATION AMONG NAVVIES. — *Sozialistische Monatsheft*, Nos. 25 and 26. Berlin, 17 November 1919.

A general co-operative society of navvies has been formed in Berlin, in order to utilise the labour of its members according to the co-operative system, to ensure to them the whole of the profits accruing from their work, and to eliminate the gains of middlemen and contractors, following to some extent the example of societies of manual labourers which have existed for some years in Italy. This co-operative organisation, is especially to be utilised for the benefit of persons out of employment, to help them in the case of work already planned, and also in the building trade. It is hoped thus to supply the place of foreign labour which at present is not to be had, and which it will probably be difficult to obtain in future. Wages will be paid to members of this association at the current rates. The weekly payment to each member will include his wages and an additional sum proportionate to the extra work done, to the saving effected in the materials used, and also to the saving of time on the estimate drawn up by the co-operative society.

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2. THE CONGRESS OF GERMAN AGRICULTURAL CO-OPERATIVE SOCIETIES. — *Sozialistische Monatsheft*, Nos. 25 and 26. Berlin, 17 November 1919.

On the 23 and 24 September there was held at Bamberg a congress of the German agricultural co-operative societies (*Deutscher landwirtschaft-*

licher Genossenschaftstug). We take from the Report of the Council of the National Federation the following facts regarding the condition of co-operation.

There exist in Germany 40,000 registered co-operative societies of which, in round numbers, 31,000, are agricultural. Of these last, 21,000, comprising about 2 million members, a figure which rises to 10 millions if we count all the persons belonging to the families of the members, belong to the Federation. In the course of the preceding year, that is to say, 1918, the number of agricultural co-operative societies was increased by 1,203. This is the first time during the last two decades that such a great increase has taken place. In its financial affairs there was also a marked increase in the same year. Affiliated to the National Federation are 27 central banks, and about 12,400 savings and loan banks. The current business of the central banks amounts to 44,2 milliards of marks. The co-operative credit societies have contributed to the various war loans subscriptions to the amount of 3,500 millions of marks. In the course of the last years co-operative societies for purchase and sale have acquired quite a special importance. Included in the National Federation are 26 central co-operative societies for purchase and sale. There were for the distribution of goods 2,643 co-operative purchase and sale societies. About 6000 savings and loan banks, and other agricultural co-operative societies have also taken part in this kind of business. The central co-operative societies did a total business (incomings and outgoings) amounting to 600 millions marks, of which 322 millions were in respect of purchases and 278 millions in respect of sales.

ITALY.

1. THE PROGRESS OF THE COLLECTIVE LEASES. — *La Cooperazione Agricola*, No. 7-8. Bologna, 1 April 1920. *La Cooperazione Italiana*, No. 1387. Milan, 13 February 1920.

Having already reviewed, in articles of a general character, the origin and working of the collective leases (*affittanze collettive*) in Italy, it seems desirable to follow their development in different regions. We now proceed to give some data respecting collective leases in the provinces of Milan and Novara.

In that of Milan the work of organising agricultural co-operative societies and collective leases is carried on by the *Federazione Agricola Interprovinciale* which numbers more than 50 affiliated societies. Of these, some avail themselves of the Federation for the collective purchase of chemical manures, machines, seeds and other agricultural requisites; others rent and cultivate land of a total area of 40,595 *pertiche* equal to about 2,700 hectares (1 hectare = 15 *pertiche*). In localities where, for want of persons with the requisite technical knowledge it was not possible to constitute local co-operative societies, the land was rented directly by the Federation. It belongs to private individuals or charitable institutions.

Agricultural co-operation, already widely diffused, more especially in the provinces of Parma, Reggio Emilia, Bologna, Ravenna and Pavia is now being organised also in the province of Novara. At Trinc, in the province of Vercelli, the local agricultural co-operative society which arose out of the Vercelli District Production and Labour Co-operative Society, has made an auspicious beginning. It has rented 425 hectares of irrigated land on easy terms from the tenant, who remains as manager. Two other co-operative societies are in process of formation. In the province of Novara, the Biandrate Agricultural Co-operative Society, which has rented some irrigated land belonging to the Great Hospital of Novara, may also be mentioned; the taking of additional land at Monticelli, Vespolate and in other localities, is contemplated. At Santino di Pallanza we have the first example of a co-operative society formed by small proprietors for the cultivation of the land.

We now give some figures from the latest report of the Committee of Management of the oldest co-operative society for the cultivation of land in the province of Parma, that of Borgo San Donnino, because it gives a suggestive picture of the increase of the net production obtained by the society from 1906-07 to 1918-19. These are the figures respecting the principal products:

Products	1906	1907	1918	1919
Corn, quintals	72.56	93.90	171.30	298.55
Grapes "	27.89	82.05	332.00	116.75
Milk "	—	—	201.98	209.07
Maize "	49.57	27.00	74.76	45.00
Beet "	—	—	370.00	374.00

This society, like others of Emilia, Romagna, and Lombardy, seeks to purchase the land that it requires. The balance sheet of 1919 shows that it possesses live-stock and implements to the value of 130,000 lire; that it has a capital of about 70,000 lire, that in 1919 it spent in labour 45,000 lire, and in manures, sulphur, etc., 12,000 lire. This was in respect of 180 *biolche* of land, nearly equal to 50 hectares. To the first farm taken in 1906, a second was added in 1917, and two more will be taken during the current year, with the help of the *Istituto Nazionale di Credito per la Cooperazione*. This society has never neglected necessary labour on its farms, it has made great use of manures, intensified the cultivation of vines, diffused the use of mechanical ploughing, employing the tractors in threshing and agricultural transport, and thus it was able to raise, from 50 hectares of unirrigated land, produce valued at the large sum of 115,515 lire.

It must finally be noted that last February the General Council of the *Lega Nazionale delle Cooperative*, when it met in Rome, took into consideration among other things co-operation for the cultivation of land, and passed an important resolution on the subject. In the Report on which the resolution was founded, the following paragraph occurs: "At first

the co-operative societies for the cultivation of land were proposed as a solution for the question of wages ; afterwards they acted as a means of insuring their members against the risk of finding themselves without employment ; later they amalgamated this function with others, for instance, the furnishing of supplies to their members. In any case the agricultural productive societies have shown themselves to be the most rapid and efficacious means of creating among farm labourers that *productive conscience* which is presupposed by any form of production unconnected with capitalist undertakings. The purchase of land by co-operative societies, as in Romagna and Emilia, is not to be taken as a proof that their object is the acquisition of property, but is rather a means of insuring to their members the minimum of land indispensable to make the labour of their hands productive." At the above-mentioned meeting the credit problem was also discussed, and the desire expressed that co-operative societies should create their own institutions, to be supported by the savings of co-operators, whereby mortgage credit should be granted for the purchase of land, and for improvements of which the cost cannot be defrayed in a short term of years.

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2. THE ORIGIN AND FUNCTIONS OF THE NATIONAL FEDERATION OF AGRICULTURAL CO-OPERATIVE SOCIETIES. *La Cooperazione Agricola*, Nos. 5-6. Bologna, 1 March 1920.

The *Federazione Nazionale delle Cooperative Agricole* which we have frequently had occasion to mention in previous articles, represents the co-ordinating centre of the movement for collective leases in Italy. It was legally constituted in December 1918, immediately after the deliberations of the Congress of Agricultural Co-operative Societies convened by the National League of Co-operative Societies at Reggio Emilia, 24 February 1918. That Congress decided upon forming the *Federazione Nazionale delle Cooperative Agricole*, having its head office in Bologna, which should incorporate with itself only such co-operative societies as are open to all whose work lies in the direction indicated by the national organisations of resistance and co-operation. In accordance with Art. 2 of the Rules, the Federation must : (a) promote the organization and development of co-operative societies, of agricultural colonies, and of collective agricultural leases in all parts of Italy, so as to facilitate in every way the direct holding of land by agricultural labourers united in cooperative societies, (b) institute offices and commercial agencies for the collective purchase of agricultural requisites and for the sale of agricultural produce, (c) provide the best means of protection of agriculture against damage from hail, fire, diseases and mortality among cattle, by means of organisations of mutual insurance. It must also endeavour to undertake the management of establishments for the manufacture of manures and other agricultural requisites, to assume directly or on account of affiliated societies -- whether by rent or purchase -- the management of

land, to open scientific offices and experimental laboratories in order to afford to those engaged in agriculture the greatest possible assistance by suggestion and practical help.

The Federation performs the functions assigned to it by means of the following Sections :

(1) The *Secretariat* for all the work of propaganda, organisation and co-ordination of the various activities of the institution.

(2) The *Commercial Agency* for the collective purchase of agricultural requisites and for the sale of agricultural produce. During the past year it furnished goods to the affiliated societies to the value of more than 3 ½ million lire. It also encouraged the sale of hemp produced by members of co-operative societies in the provinces of Bologna and Ferrara, always aiming at the further extension of its sphere of activity.

(3) The *Insurance Section* for the protection of agriculture against damage from hail, fire, diseases and mortality among cattle, etc. This Section, fully organised, is now beginning its labours, from which it is expected that the affiliated societies will derive considerable benefit.

(4) The *Accountancy Section*, for keeping the accounts of the Federation, and also those between the Federation and the affiliated societies.

Through the work of these Sections the Federation expects to accomplish its principal objects. At the present time, it is contemplating the establishment, for the benefit of the affiliated societies, of offices of technical and administrative assistance and consultation under the direction of its own central office. It is also considering the desirability of assuming the management of establishments for the manufacture of manures and other agricultural requisites.

Those societies belonging to the National League of Co-operative Societies, which are affiliated, through the medium of local organisations of resistance, to the National Federation of Workers on the Land, may also become affiliated to the National Federation of Agricultural Co-operative Societies.

3. A LABOUR AND CO-OPERATION BANK. — *Credito e Cooperazione*, No. 13. Rome, 1 July 1919.

On the initiative of the Catholic credit institutions belonging to the *Federazione Bancaria Italiana*, in April 1919 a *Banca del Lavoro e della Cooperazione* was opened in Rome with a capital of 3,000,000 lire. The object of this bank is to place the advantages of credit and saving at the disposal of production and labour in their various forms, with special regard to agricultural production and to small industries and particularly to finance the co-operative societies for production, labour and consumption, and their consortia or local and national federations. It will also be able to co-operate in the increase of technical instruction, and of institutions of thrift and assistance which tend to give higher value to labour.

Thus, together with the *Federazione Italiana delle Casse Rurali*, the *Federazione Nazionale delle Unioni Agricole*, the *Federazione Nazionale delle Cooperative di Consumo*, the *Unione Nazionale delle Cooperative di Produzione e Lavoro*, the *Federazione Bancaria Italiana*, the *Banca del Lavoro e della Cooperazione* has arisen to complete the group of Catholic co-operative organisations.

4. THE GENERAL MEETING OF THE ITALIAN FEDERATION OF CATHOLIC RURAL BANKS — *Il Domani Sociale*, No. 34. Rome, 7 December 1919.

The general meeting of representatives of 2,500 Catholic rural banks was recently held in Rome. These banks form 35 local federations affiliated to the Italian Federation of Catholic Rural Banks. The members number in all more than 260,000, the capital is about 10 millions, the fiduciary deposits amount to 301,027,185 lire. The loans granted during the financial year 1918-19 reached the figure of 85,758,728 lire. The meeting discussed measures calculated to give new life and development to small agricultural co-operative credit, and decided to initiate the organisation of practical courses of book-keeping, which would offer the double advantage of training officials capable of administering single banks, and of diffusing the spirit of co-operation. The meeting then invited the local federations to intensify the inspection of societies. From the report on the work of the Federations, it appears that federations were established in 1918-19 at Ancona, Avezzano, Cremona, Modena, Bari, Pisa, Albenga and Rieti. Many other federations are about to be formed, for instance at Verona, Vicenza, Pavia, Alba and Teramo. The establishment of federations at Perugia, at Padua, in Sardinia, etc., is now under consideration.

POLAND.

THE ORGANIZATION OF CO-OPERATIVE SALE. — *La Réforme Économique*, Paris, 20 March 1920.

In consequence of the depreciation of the Polish mark the importation of raw materials into Poland has become practically impossible. To ameliorate this condition a powerful economic group, the Agricultural Syndicate of Poland, has devised a very ingenious system of barter. It supplies manures to the farmers, who pay in kind with a fixed percentage of their harvest. This percentage is consigned to a factory, which also pays in kind with a fixed percentage of the produce manufactured, flour, sugar, starch, etc. This manufactured produce is exported by the Syndicate to pay for the manures bought from foreign countries. The system works perfectly.

SWITZERLAND.

THE FEDERATION OF CO-OPERATIVE DAIRY SOCIETIES OF CENTRAL SWITZERLAND IN 1918-19. — *Schweizerisches Zentralblatt für Milchwirtschaft*, Brugg, 23 and 30 October 1919.

The year ended 30 April 1919 may be said to indicate the culminating point of the external development of the *Verband zentral-schweizerischer Milchverwertungsgenossenschaften*. In fact, there are now few co-operatives dairy societies which do not belong to it.

Its position for the last two years is shown below :

Year ending 30 April	•	Number of co-operative societies	Members	Number of dairy cows
—		—	—	—
1918		327	7,469	67,574
1919		332	7,915	67,357

Twenty-three farms belonged to the Federation during the last business year.

The total volume of business done (incomings and outcomings) in 1918-1919 amounted to 55,024,964 francs, with a net profit of 72,642 francs ; the milk produced reached 1,303,233 quintals, the number of affiliated societies was increased by five, that of the members by 446. On the other hand the number of dairy cows diminished by 222.

This Federation also forms part of the Central Federation of Swiss Milk producers (*Zentralverband schweiz. Milchproduzenten*).

UKRAINE.

AGRICULTURAL CO-OPERATION. — Report presented to the Peace Conference by the Union of Co-operative Distributive Associations of Ukraine (*Dnipro-Soyus*) according to *Les Annales de la Mutualité et de la Co-operation Agricoles*. Paris, January-February 1920.

In the territory of Ukraine, especially in the nine governments of Volhynia, Ekaterinoslav, Kiev, Podolia, Poltava, Kherson, Taurida, Kharkov and Tchernigov, as well as in those parts of Kursk and Voroneg which belong to Ukraine, there are about 20,000 peasants' co-operative societies with nearly 5,000,000 members. Many of these co-operative societies are among the oldest co-operative organisations existing in the territory of the former Russian Empire.

Until the revolution of 1917 these co-operative societies for political reasons had not been authorized to form national unions. When, at the beginning of 1917, however, the autonomous government of Ukraine was constituted, which after the Bolshevik revolution proclaimed the indepen-

dence of Ukraine, the co-operative societies had already formed three Central National Unions of Co-operative Societies which grouped together at least 90 per cent of the local co-operative organisations existing in Ukraine. These are:

(1) The *Dnipro-Soyus* (Union of Co-operative Distributive Associations of Ukraine) comprising 80 district co-operative unions which represent 8,000 local societies with 3,000,000 members.

(2) The Bank of Ukraine, of which the shareholders are co-operative credit unions co-operative distributive unions, and co-operative agricultural societies. On 1 April 1919, 130 district unions were shareholders of the Bank.

(3) The co-operative agricultural societies united in the Federation of Ukrainian Societies which comprised on 1 April 1919 32 district unions and 217 local societies. The object of the Federation is the purchase of agricultural implements and of manures, the sale of agricultural produce, and the organization of co-operative agricultural societies (dairy societies, cattle-breeding societies, etc.).

The development of these central federations has been very remarkable in the last few years, in spite of very unfavourable political conditions. The Bank of Ukraine has become the veritable financial centre of the whole of the Ukraine co-operation.

The *Dnipro-Soyus* and the Federation of agricultural co-operative societies have successfully directed their efforts to buying and selling, as well as to production (the manufacture of agricultural machines at Odessa, of soap, tobacco, and boots and shoes, also spinning).

The three central unions of the Ukraine have formed, for financial and commercial transactions abroad, a special federation, known by the name of *Ozuchs*, which has its representatives in London, Paris, the Hague, Rome and Vienna.

The Bank of Ukraine and the *Dnipro-Soyus* are also represented in London and Paris.

The central Federations of the Ukrainian co-operative organisations entered, in August 1919, into the International Co-operative Alliance. Their head offices are at Kiev.

UNITED STATES.

1. AGRICULTURAL CO-OPERATION IN NEW YORK STATE. — Advance sheets furnished to the International Institute of Agriculture of a report on the work of the Bureau of Co-operative Associations.

It has been realised for some years past that the future of agriculture in the State of New York is endangered by the competition of the large-scale, co-operatively organised agriculture of the Western States. To survive, it must meet this competition by greater efficiency in production and marketing.

The Bureau of Co-operative Associations, a section of the Division of Foods and Markets in the Department of Farms and Markets of New York State was formed under the Agricultural Law of 1913 to "aid and assist in the organization of co-operative societies among producers and consumers for the purpose of securing more direct business relations between them."

Demands for information regarding co-operation, for addresses at public meetings, for practical help in drafting articles of incorporation and bylaws and for advice as to methods of organization and operation in 1919 were overwhelming.

The Bureau assisted in the organization of 160 associations engaged in the marketing of 16 different kinds of products. Among these were ten apple packing associations in Niagara county, which last autumn successfully graded, packed and marketed \$750,000 worth of apples, reducing the cost of packing to the grower and rendering the fruit much more satisfactory to the consumer. Sheep breeders' associations, organized with the help of the Bureau, marketed in 1919 over a million pounds of wool at a saving of ten cents per pound.

The Onondaga County Milk Producers, one of a number of dairy associations assisted, has four hundred members and is erecting a \$300,000 milk plant with the very best apparatus for pasteurizing and bottling, thus affording the farmers a reliable outlet and assuring the consumers a reliable and continuous supply of the best quality.

Another of the associations organized is the Central New York Tobacco Growers' Co-operative Association which is handling a five hundred acre crop of tobacco for its members, valued at \$750,000.

Hay associations organized since June 1918 now handle many hundred carloads of hay at a saving to their members of many thousands of dollars. Maple product associations have been organized to protect the producer from the speculator who attempts to control market prices. These associations are furnishing consumers an absolutely pure article not always readily obtainable through regular trade channels.

These producers' associations not only handle produce for their members but purchase supplies amounting in value to several million dollars a year.

* * *

2. CO OPERATION IN THE CULTIVATION OF CITRUS FRUITS IN FLORIDA. —
Florida Grower, Vol. XVI, No. 1. Tampa, 24 January 1920.

A co-operative society known as the Mt. Dora Co-operative Citrus Cultural Association has been formed in Florida for the purpose of cultivating co-operatively the citrus groves of the members. The original members collectively owned 100 acres and paid \$25 per acre in advance to provide the initial working capital.

The members' properties are cultivated by the association and the manager has authority to hire the necessary labour and to discharge

such labourers as may not prove satisfactory or may not be further required. A bill for the work done on each property is rendered to the owner every three months.

It is intended to organize similar associations in other parts of the citrus growing district of Florida and the labourers will be trained so that they may take up positions as assistant managers and eventually as managers.

It is anticipated that, as a result of the co-operative system of cultivation, the cost of production will be considerably reduced and that the fruit will be of more uniformly high quality.

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3. THE HORSE ASSOCIATION OF AMERICA. — *California Cultivator*, Vol. LIV, No. 9.
Los Angeles, 28 February 1920.

It is estimated that of 21,000,000 horses now on farms and ranches in the United States, less than 5,000,000 are of distinct types well adapted to the work for which they are used. To promote improvement in the existing types of horses a non-profit association has been formed under the laws of Illinois with the title of the Horse Association of America. Shares are of the value of \$5 and there is no limit to the number which may be taken up. The initial payment of \$5 also pays the first year's dues; subsequent dues are \$5 per year per share.

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Part II: Insurance and Thrift

SWITZERLAND.

INSURANCE AGAINST MORTALITY AMONG LIVE STOCK IN 1917.

OFFICIAL, SOURCE :

RAPPORT DU BUREAU FÉDÉRAL DES ASSURANCES SUR LES ENTREPRISES PRIVÉES EN MATIÈRE D'ASSURANCES EN SUISSE EN 1917. — Published in accordance with a resolution of the Swiss Federal Council of 1 November 1919, 32nd year Berne, 1919.

Insurance against mortality among live stock is practised in Switzerland by private businesses and by public cantonal institutions, owners being compelled by law in many cantons to insure their animals with these institutions. We will here examine the business done in 1917 by private insurance societies, as this is revealed by the report cited above and lately printed.

Three mutual societies, namely the *Mutuelle Chevaline Suisse* of Lausanne, the *Badische Pferdeversicherungs-Anstalt auf Gegenseitigkeit* of Karlsruhe and the *Garantie Fédérale* of Paris, and one stock company, the *Perlerberger Versicherung Aktien-Gesellschaft* of Perleberg in Prussia, were authorized to practise insurance against mortality among livestock in Switzerland in 1917 as in the previous year. The two first-named societies insure only horses ; the two last also assume the risks of cattle and sheep

It may be stated generally that the course of the business of these four societies was satisfactory in 1917. The premiums received and the indemnities paid increased almost in the same proportion. As regards Switzerland in particular and the business done there, the influence of the war has continued to be felt fairly strongly. It is however true that the sum insured has again risen, but it has not reached its pre-war figure. If the very appreciable increase in the value of the insured animals be also taken into account, it may be concluded that there was in 1917 an important diminution in their number. It was presumably the horses

which were most thus affected. The importation of horses was almost entirely suspended. The number by which they diminished can moreover be written off only to a very incomplete extent, owing to the ever rising prices in the market for horses.

As regards the premiums received in Switzerland in 1917, it should be noted that they have not followed the rise of the sum insured. It should also be noted that the large reduction in the total sum of the indemnities paid to insured persons in Switzerland in 1916 continued in 1917. This reduction may however be only apparent. If we study more closely the causes of the losses indemnified in the insurance of horses, we are surprised by the small number of the animals recognized to be unable to go on working. We are thus led to conclude that more intensive use was made of horses than previously, as a consequence of the fall in their number on the one hand and of the great difficulty of replacing them, owing to their over-high prices on the other. Therefore many animals are used who would not have been considered in normal times, fit for the work to which they are put. This does not however prevent the fact that sooner or later indemnities have to be paid for these animals.

The progress of insurance against the mortality of live stock in Switzerland was as follows from 1912 to 1917:

TABLE I. — *Development of Insurance against Mortality among Live Stock, 1912-17.*

Year	Sums Insured	Premiums	Losses	
			Amount	Percentage of premiums
	Francs	Francs	Francs	
1912	21,035,511	533,5	402,224	75.8
1913	18,678,708	632,932	541,145	84.8
1914	20,371,340	604,394	486,023	79.9
1915	13,946,032	573,403	481,580	92.7
1916	12,932,894	520,386	388,816	74.7
1917	13,900,032	496,107	366,752	73.9

For the years from 1912 to 1916 the figures in this table referring to the sums insured differ from those which appeared in the reports of the Federal Insurance Office published in past years, and which were reproduced by us in various articles in this review.

The difference is explained by the fact that in the report now our authority the amount of the sums insured during the year is given, while for previous years the position was shown as regards the insurance current at the end of the year. The amount of the premiums received also does not agree with the figures in previous reports. This difference is due above all to the fact that the figures of the *Badische Pferdeversicherungsanstalt*

were corrected because they included the members' entrance fees. It should be noted further that for 1915 account was kept of the supplementary levy made by the *Mutuelle Chevaline Suisse* in order to cover the excess expenditure of the year.

Having made these general remarks we will pass to an examination of the business of each of the four societies active in this branch of insurance. In a separate section — the last — we will deal with the State subsidies, whether of the Federation or of the cantons, to insurance of this kind in 1917.

§ I. THE "MUTUELLE CHEVALINE SUISSE."

The *Mutuelle Chevaline Suisse*, which had levied a supplementary premium of 30 per cent. from its members in 1915, was not obliged to have recourse to this expedient either in 1916 or in 1917. This society was able, without taking advantage of its option of levying a supplementary premium, to pay to those of its insured who suffered losses 75 per cent. of the estimated value of the lost animal, in accordance with the terms of the policy. The insurer himself insures 25 per cent. of the estimated value of his insured horses: that is to say one quarter of their value is uninsured. In this way the society influences its members to look after their insured horses and keep them in good condition.

The *Mutuelle Chevaline Suisse* is active only in Switzerland. Its business from 1912 to 1917 was as follows:

TABLE II. — *The Business of the "Mutuelle Chevaline Suisse"*
from 1912 to 1917.

Year	Number of insured horses	Sums insured	Premiums received	Losses indemnified
		Francs	Francs	Francs
1912.	7,277	7,138,880	226,846	201,082
1913.	7,644	7,505,335	241,129	225,105
1914.	7,215	7,075,835	240,876	230,274
1915.	6,853	6,791,110	221,605	238,148
1916.	6,402	6,514,430	250,914	200,943
1917.	6,089	7,379,250	219,514	163,431

This table shows that while the sums insured increased notably, the premiums received diminished very appreciably. The large reduction in the amount of the losses indemnified should be attributed, first of all, to the increased sum obtained for carcasses — 40,112 francs in 1915; 64,978 francs in 1916; 101,312 francs in 1917. The society emphasizes

the importance of timely slaughtering. It is to the interest of the insured persons to notify the society immediately when there is a case of sickness.

The costs of administration were notably increased in 1917. In terms of percentage of premiums received (excluding entrance fees) these costs were as follows:

1912	20.3 per cent	1915	18.5 per cent.
1913	20.1 " "	1916	19.0 " "
1914	19.0 " "	1917	23.4 " "

§ 2. THE "BADISCHE PFERDEVERSICHERUNGSANSTALT AUF GEGENSEITIGKEIT."

This society also ended the year 1917 showing very satisfactory results. As in the 19 preceding years it was able to do without asking for the payment of a supplementary premium under the head "insurance for members." In the class of non-members agreements were concluded by the payment of fixed premiums; insurances maturing in short terms (transport, reinsurance, insurance referring to the period of pregnancy, insurance of army horses during manoeuvres and of oxen while pastured in the mountains, etc.) are here especially in case.

This society also limits the effects of the obligation to indemnify losses: the indemnity therefore represents only 80 per cent of the insured value of an animal killed by an accident and only 70 per cent. of that of an animal compulsorily slaughtered or of one which has become unfit for the work which, according to the insurance agreement, it should do.

It is clear that members' insurance is the class of business on which the society's whole operations are founded. At the close of the business years from 1912 to 1917 its insurance stood as follows.

TABLE III. — *Insurance of the "Badische Pferdeversicherungsanstalt auf Gegenseitigkeit," 1912-17.*

Year	Membership	Number of insured horses	Sums insured
1912	14,885	21,451	23,584,041
1913	15,251	21,956	24,336,610
1914	14,227	13,653	15,381,183
1915	11,196	11,052	14,234,183
1916	10,031	11,027	16,254,768
1917	8,893	11,314	23,338,824

The membership thus fell by 1,128 in 1917 (by 1,155 in 1916). The number of insured horses, on the other hand, fell by 25 in 1916 but increased by 287 in 1917. The sums insured increased largely, namely by 6,384,056 francs, that is by the equivalent of more than $\frac{3}{8}$ of the amount of the insurance current in 1916.

By its rules this society is bound to pay into its reserve fund half its entrance fees, the interest on previous reserve funds, and any profits which may remain after the indemnities of the previous year have been paid. In this way in 1917 it was possible to pay 75,784 francs into the reserve fund (in 1916, 45,028 francs). Moreover the whole sum by which income exceeded expenditure, namely 116,727 francs, could be paid into the same fund, which therefore amounted at the end of the year to 899,830 francs.

Costs of administration diminished slightly in terms of percentage of premiums received they were as follows:

1912	19.0 %	1915	23.4 %
1913	19.4 %	1916	22.9 %
1914	21.2 %	1917	19.1 %

The Swiss business of this society from 1912 to 1917 was as shown in Table IV.

TABLE IV. — *Swiss Business of the "Badische Pferdeversicherungsanstalt auf Gegenseitigkeit," 1912-17.*

Year	Insured horses	Sums insured	Gross premiums	Gross losses
		Francs	Francs	Francs
1912	3,129	3,459,032	136,025	122,584
1913	3,078	3,411,758	131,999	127,260
1914	2,845	3,128,330	125,545	98,562
1915	2,655	2,933,277	113,892	100,870
1916	2,531	2,867,624	110,800	90,934
1917	2,344	2,855,577	119,269	99,762

In our previous general observations as to business in Switzerland we mentioned why the figures as to sums insured and gross premiums from 1912 to 1916 were corrected. We should notice that the number of the insured horses, like the sums insured, fell constantly in these six years. The amount of premiums, like that of losses, rose again, but the ratio of the latter to the former was not appreciably altered.

§ 3. THE "PERLEBERGER VERSICHERUNGS-AKTIE-GESELLSCHAFT."

This society was transformed from a mutual society to a stock company in 1911. From the time when it first became active the insurance of butchers' stock and of the transport of live stock formed the preponderant part of its business. Insurance of this kind, maturing in short terms, could be concluded only by means of fixed premiums. It was therefore decided to transform the society into a stock company, and from this time the *Perleberger* accepted insurance only at fixed premiums. In spite of the war its *general business* in 1917 was even more successful than in 1916. The number of insured animals and the sums insured from 1913 to 1917 were as follows

TABLE V. — *Insurance of the "Perleberger Versicherungs-Aktie-Gesellschaft," 1913-17.*

Year	Number of insured animals	Sums insured
		Francs
1913 .	1,469,294	378,784,142
1914	1,446,021	377,436,166
1915	1,168,176	379,322,664
1916	1,120,004	594,177,576
1917	1,186,193	771,374,316

The increase in the number of the insured animals is not great but that in the sums insured is considerably larger. The fact, already noticed is essentially due to the enormous increase in the value of the animals.

The *Perleberger Versicherungs-Aktien-Gesellschaft* made in 1917 no new insurance in Switzerland. In 1913 it had begun the insurance of butchers' stock there, but it gave this up in 1914, probably because its Swiss business showed unfavourable results at the end of the year. This business was as follows in 1913 and 1914.

TABLE VI. — *Swiss Business of the Perleberger in 1913 and 1914.*

Year	Sums insured	Premiums received	Losses indemnified
	Francs	Francs	Francs
1913	1,659,800	4,900	5,286 .
1914	5,297,190	20,409	32,348'

§ 4. THE "GARANTIE FÉDÉRALE."

The Paris "Garantie Fédérale" is a mutual society having fixed premiums. It therefore disclaims *a priori* the right to levy supplementary premiums. Owing to the lack of a share capital and reserves sufficient to give security in unfavourable years, the indemnities paid necessarily vary considerably. In bad years, when the reserve fund accumulated during several years is insufficient to cover the balance of expenditure in a disastrous year, the two other societies divide the deficit equally among all the insured. The *Garantie Fédérale* follows another course, those of the insured who have suffered losses bearing the burden of its evil fortune.

This system certainly does not observe the principle of community of risks. On the other hand the *Garantie Fédérale* limits its liability in the case of a loss, paying only 80 per cent. of the value of the animal as estimated by the experts at the time of the loss. In all cases therefore the animal's owner is the insurer of 20 per cent. of its value. Indemnities paid hitherto have been rather under 80 per cent. of the estimated value than otherwise.

The management of the *Garantie Fédérale* is divided, for the collection of premiums, the payment of losses and the constitution of reserves, into as many independent sections as there are countries in which it does business. In France the indemnities paid from 1912 to 1917 were as follows, in terms of percentage of the estimated value of animals lost:

	1912	1913	1914	1915	1916	1917
Horses	45 per cent.	72 per cent.	72 per cent.	72 per cent.	64 per cent.	64 per cent.
Cattle	81	80	72	72	72	72
Sheep	61	8	72	72	72	72

As this table shows, the normal contractual indemnity of 80 per cent., which should be that paid regularly, was paid only exceptionally.

In Switzerland conditions were no better. The percentages of estimated value paid as indemnities was as follows:

	1912	1913	1914	1915	1916	1917
Horses	57.6 per cent.	52 per cent.	56 per cent.	60 per cent.	60 per cent.	68 per cent.
Cattle	57.6	54.4	56	80	80 per cent.	80

Only the indemnities paid in cases of loss of cattle reached the normal and contractual rate in recent years. But it should be noticed that the percentage of value paid for horses increased.

The small percentages shown were due to this society's large costs of administration, which amounted, for all the business of the two years 1916 and 1917, taken together, to 46.2 per cent. of the total premiums received.

In the following table we give data as to the development of the *Garantie Fédérale* in Switzerland.

TABLE VII — *Swiss Business of the "Garantie Fédérale," 1912-17.*

	Number of insured animals	Sum- insured	Gross premiums	Gross indemnities
		Francs	Francs	Francs
1912	7 100	6,801,065	273,100	182,751
1913	6 477	6,101,815	254,903	215,011
1914 . . .	5 110	4,860,985	207,563	164,767
1915	4 237	4,221,045	180,155	142,561
1916	3 731	3,550 840	158,671	96,938
1917	3 830	3,665,205	157,323	103,558

The reserve fund for current risks intended for Swiss business only, could be increased by 4,000 francs and was thus brought up to 54,000 francs.

§ 5. STATE GRANTS TO INSURANCE AGAINST MORTALITY AMONG LIVE STOCK IN 1917

In order to give a complete picture of the present state of insurance against mortality among live stock in Switzerland, we must mention the many societies which practise insurance without being subject to the control of the Federation. These exist in all the cantons. We should also note that by the federal law of 22 December 1893 as to the improvement of agriculture by the Federation, this latter makes, through the medium of the cantons, grants equal to those which the cantons make to the local institutions when a canton or an association of owners of live stock resolves that insurance shall be organized compulsorily in a given territorial unit — commune, district or canton.

The grants were somewhat restricted in consequence of the application of the decree of the Federal Council of 30 October 1914 as to fixing the amount of federal grants to the insurance of live stock. They were thus reduced to 1 franc per head of insured cattle and 40 centimes per head of small stock.

Grants of this kind were paid by 17 cantons and half cantons

Table VIII, compiled from the reports for 1918 of the Swiss Department of Public Economy, contains data as to the amounts of insurance and of the grants of these cantons.

It shows that in 1917 the cantons subsidized insurance against mortality among live stock up to the total amount of 1,060,322 francs, that is at the rate of 1.24 francs per head of insured stock.

TABLE VIII. - Grants to Insurance against Mortality among Live Stock in Switzerland in 1917.

Cantons	Insured animals	Number of losses	Indemnities		per head of stock	Federal grants	
			total	frances		frances	frances
1. Zurich	Large stock Small stock	2,621 46	141,702.00 104,700.00	108.00 36.00	1.25	111,007.00 3,061.00	
2. Berne	Large stock Small stock	5,232 144	800,148.57 47,761.14	13,300 5.00	1.00	1,062,700.00 431.10	
3. Uri		86	69,122.49	17,700	1.65	1,112.00	
4. Glarus		393	60,628.30	17,700	1.65	1,112.00	
5. Fribourg		2,083	175,118.10	17,700	1.65	1,112.00	
6. Soleure	Cattle Horns	1,139 451	14,612.04 10,118.14	11.00 22.00	1.00	1,462.60 2,067.40	
7. Basle-Town		48	13,295.85	77.00	2.91	1,043.00	
8. Basle-Country	Large stock Goats	491 22	5,684.07 602.00	96.00 11.00	1.00	1,064.30 236.40	
9. Schaffhouse	Large stock Small stock	310 155	92,784.10 16,714.66	299.00 30.00	1.86	13,364.00 800.80	
10. Grisons		2,300	78,311.79	340.00	2.70	77,560.00	
11. Argovie	Cattle Horns	2,191 491	266,501.13 13,108.75	123.00 27.00	1.00	78,057.00 3,050.80	
12. Thurgovie	Animals over 6 months old under 6 months old	2,245 583	4,146.25 16,072.10	188.00 84.00	1.00	50,219.00 8,215.00	
13. Ticino		218	206,044.00	167.00	1.46	9,572.00	
14. Vaud		1,491	288,144.00	223.00	1.50	50,949.00	
15. Valais		453	870,963.35	157.00	1.00	37,593.00	
16. Neuchâtel		253	3,440.78	126.00	1.17	10,170.00	
17. Geneva		230	4,160.88	179.00	2.00	8,211.00	
Total	Large stock Small stock	24,710 1,815	3,878,367.49 53,372.79	170.78 29.41	1.27 0.45	800,985.60 97,598.00	
		1,525	3,031,740.28	100.32	1.24	810,728.40	
		25,060	94,869,30.27	159.14	1.21	815,860.38	
		46,755	344,621.59	157.89	1.23	79,547.10	
		28,749	4,774,994.35	148.80	1.20	1,004,684.05	

The Federation made, on the other hand, an average grant of 97 centimes per head of large insured stock and 36 centimes per head of small insured stock and goats, in other words an average grant of 95 centimes per head of all stock. It thus spent 810,728 francs.

The cantonal grants in 1917 slightly increased but still fell short of their sum in 1914. The federal grants, on the other hand, slightly diminished.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FINLAND.

MUTUAL INSURANCE OF LIVE STOCK — Forsäkringspektorens Berättelse angående Forsäkringsväsendet i Finland År 1916 (*Report on Position of Insurance in Finland in 1916*), Helsingfors, 1919, Forsäkringspektorens Berättelse angående de Lokala Brandstods- och Kretursförsäkringsföreningarnas Verksamhet under År 1916 (*Report on Business of Local Live Stock and Fire Insurance Associations in 1916*), Helsingfors, 1919

The recent publication of the reports for 1916 of the Inspector of Insurance allows us to trace the further development of the insurance of live stock in Finland of which we have several times spoken in this review (1).

Altogether there were insured, at the end of 1916, 62,534 horses (21.7 per cent. of the total number of horses above three years old in the country) for a sum of 28,347,000 Finnish marks, and 59,950 head of cattle (5.1 per cent. of all the cattle above two years old in the country) for a sum of 9,640,700 Finnish marks. Including the insurance of animals of other kinds (for a sum of 50,500 marks), the total value of the insured live stock was therefore 38,038 600 Finnish marks as against 30,708,789 Finnish marks in the first year, 27,163,283 Finnish marks in 1910 and 14,967,152 Finnish marks in 1905.

The insurance was afforded by four mutual societies whose sphere included all or a large part of the country, and by local mutual associations whose number increased from 66 in 1905 to 100 in 1910, 127 in 1915 and 129 in 1916. Of these latter societies 86 in 1916 insured cattle and horses, 37 horses only, and 6 cattle only.

The sums insured by the four large mutual societies amounted to a little more than half the total (19,315,000 Finnish marks as against 18,723,000 Finnish marks insured by the local mutual societies).

(1) See our issues for May 1913, August 1915 and March and July, 1917.

The 129 local mutual societies were distributed as follows in accordance with the dimensions of the risks they covered :

Insured value less than 50,000 Finnish marks . . .	30	23.3
" " from 50,000 to 100,000 Finnish marks	32	25.8
" 100,000 " 200,000 " " "	39	30.2
" " " 200,000 " 500,000 " " "	25	19.4
" " more than 500,000 " " "	3	2.3

The premiums received by the four large societies amounted to 478,000 Finnish marks (3.2 per cent. of insured value) for horses and 96,300 marks (2.2 per cent. of insured value) for cattle, that is 574,300 Finnish marks (3 per cent. of insured value) altogether. Those received by the local mutual societies amounted to 258,922 Finnish marks (1.4 per cent. of insured value) distributed as follows : horse insurance, 136,021 marks ; cattle insurance, 30,430 marks ; insurance of other animals, 566 marks ; to reserve fund, 12,787 marks ; unspecified, 79,118 marks.

The number of cases of loss and the amount of indemnities were as follows :

The four national mutual societies :

	Number	Indemnities Finnish marks
Dead horses	444	150,466
Depreciated horses	226	38,937
Dead cattle	324	46,728
	—	—
Total . . .	994	245,131

The local mutual societies :

Dead horses	319	126,814
Depreciated horses	197	
Dead cattle	253	27,816
Depreciated cattle	18	
Other animals	—	555
	—	—
Total . . .	787	155,186

The following table shows, for 1916 and a series of preceding years, the percentage of insured animals on which losses were incurred, the amount

of indemnities per 100 marks of insured capital, and the average indemnity per loss.

Losses and Indemnities.

Year	National mutual						Local mutual societies					
	Percentage of insured animals lost		Percentage of insured capital paid as indemnities		Average indemnity per loss Finnish marks		Percentage of insured animals lost		Percentage of insured capital paid as indemnities		Average indemnity per loss Finnish marks	
	Horses	Cattle	Horses	Cattle	Horses	Cattle	Horses	Cattle	Horses	Cattle	Horses	Cattle
1906	3.1	1.0	1.80	0.70	249.6	90.0	1.60	1.86	1.11	1.18	294.73	55.96
1907	3.2	1.2	2.20	0.87	266.9	101.5	1.63	1.45	0.97	1.00	195.64	62.25
1908	2.9	1.0	1.62	0.60	264.9	91.8	1.65	1.19	1.11	0.87	224.69	68.21
1909	2.7	1.2	1.88	0.70	285.9	86.0	1.74	1.46	1.16	1.00	226.70	65.20
1910	2.9	1.3	1.89	0.81	286.6	107.4	2.03	1.26	1.20	0.93	204.80	71.30
1911	3.1	1.3	2.13	0.69	285.3	98.5	3.31	1.25	1.68	0.97	299.22	76.56
1912	2.6	1.2	1.81	0.76	288.5	95.7	2.21	1.52	1.37	1.06	214.05	71.08
1913	3.0	1.2	1.90	1.13	257.1	104.4	1.94	1.33	1.26	1.00	225.49	80.65
1914	3.0	1.9	1.94	1.38	216.2	109.4	2.07	1.45	1.25	1.04	213.27	81.89
1915	2.9	1.7	2.03	1.24	279.1	113.5	1.84	1.40	1.24	0.97	237.58	84.31
1916	2.1	1.6	1.55	1.27	296.1	144.2	1.54	0.64	1.00	0.53	245.78	109.92

The financial results obtained during the year by the four national mutual societies were, taken together, as follows:

Receipts:

	Finnish marks
Premiums and supplementary payments . . .	571,392
Interest on mathematical reserve fund . . .	2,744
Total . . .	574,136

Payments:

Settlement for losses and transferences to reserve for settlement of losses	243,852
Payments to mathematical reserve fund . . .	61,722
Costs of management	202,422
Total . . .	508,016

A net total profit of 66,120 Finnish marks was thus obtained. But one mutual society showed a loss of 2,851 Finnish marks.

The local mutual associations obtained the following total results :

Receipts :

	Finnish marks
Premiums and supplementary payments . . .	263,487
Interest and other incomings	24,519
Total . . .	288,006

Payments :

Indemnities	155,185
Payments to reserve fund	32,074
Costs of management.	36,407
Interest and other outgoings	29,772
Total . . .	253,438

A net profit of 34,568 Finnish marks was thus obtained. But it should be noted that 48 societies closed their books showing a deficit, amounting in the aggregate to 22,588 Finnish marks, while 81 showed a profit which amounted altogether to 57,150 Finnish marks.

The reserve fund of the four large mutual societies was made up as follows at the end of 1916.

	Finnish marks
Reserve fund	197,579
Mathematical reserve	130,322
Reserve for risks of settlement	54,358
Other reserves	10,100
Total . . .	392,359

That of the local mutual societies was as follows :

Reserve fund	164,912
Other funds	55,593
Total . . .	220,505

SPAIN.

A TYPICAL PROVIDENT LAND CLUB. — *Anales del Instituto Nacional de Previsión*, Year XI, Nos. 41 and 42. Madrid, 3rd. and 4th. quarters, 1919.

In the article on "Old Age Pensions for Rural Workers in Spain" published in our issue of January 1920, we referred to the formation of

Provident Land Clubs (*Cotos sociales de provisión*) which acquire plots of land and work them in common in order to obtain funds for increasing the old age insurance of their members. Such a club has been formed in the town of Lanaja (Province of Huesca) and has acquired a piece of land of the area of 15 hectares. As it is typical of this new form of mutual insurance, we give a sketch of its methods of working.

The Club will not be separately registered, but will be a section of the Lanaja Agricultural Syndicate. All members of the Agricultural Syndicate who are less than 50 years old and all inhabitants of Lanaja of either sex between the ages of 18 and 45 years who belong to families paying less than a certain sum in taxes may become members of the Club.

Although it is considered an essential characteristic of a Provident Land Club that the land which it acquires should be cultivated in common, other methods of cultivating the land, or part of it, are not excluded, and the rules permit that it be leased, let on a produce-sharing system, or cultivated on behalf of the Club by a manager.

If the land be cultivated in common, each member will undertake to contribute to the cultivation either so many 'days' work or a sum equivalent to the wages for such work. The rate of wages will be fixed by the Committee of Management, taking account of the time of year at which the work is done and of local conditions. If a member is unable to work on the land on the day when it is his turn to do so, he may arrange to work instead on another day.

From amongst the members, a practical farmer will be chosen to direct the work for three or for six months, when another will be chosen to take his place. During his term of office, such member will have full liberty to do every thing necessary to accomplish his task. He will be responsible only to the Committee of Management, who will fix the remuneration to be paid to him.

If the land is cultivated by any other method, the Committee must conform to local customs and, in making contracts for work, for letting, etc., must not take account of the law of supply and demand, but must act on principles of humanity and justice. It must also take care that the collective interest of the Club is not sacrificed to the interest of any individual.

When the expenses of cultivation have been paid, the net produce of the year will be provisionally allocated as follows:

- 10 per cent. to sick benefits.
- 45 per cent. to old age and invalidity pensions.
- 20 per cent. to pensions for widow and orphans.
- 10 per cent. to unemployment benefits.
- 5 per cent. to a Scholarship Fund.
- 5 per cent. to a Fund for the Protection of Old Age.
- 5 per cent. to the management expenses.

Sick benefits will only be given to those members of the Club who by their labour habitually maintain or help to maintain a family. They must

not exceed three-fourths of the daily wage current in the locality at the time they are given. Except in case of extreme necessity sick benefits must not be given for more than two months in any one year.

The method followed in providing old age pensions will be adapted to the national system recently established and the insurance will be effected through the National Thrift Institute. The pension assured to any member out of the funds of the Club must not exceed 1 ½ pesetas a-day but a member may increase the amount by personal contributions voluntarily made.

Pensions will begin at the age of 65 years. For those who have parents living or who have or are likely to have children, it will be obligatory to take out a combined life and old-age pension insurance. Those who have neither parents living nor direct descendants are exempted from insuring their lives and may take out a larger old-age pension insurance instead.

The 45 per cent. of the net produce which is set aside for old age insurance will be so distributed amongst the members that such an amount will be entered in the pass-book of each member as will produce approximately the same amount of pension. It will, accordingly vary with the age of the member, and for guidance in this distribution the rules give the following table :

If to members less than 20 years of age is given 1 peseta,

To members between 21 and 25 years of age will be given 1.23 pesetas

,	26	30	,	,	,	1.50	"
"	31	35	,	"	"	1.84	,
,	36	40	,	"	"	2.25	"
,	41	45	,	,	"	2.76	"
,	46	50	,	,	"	3	"

The provision of pensions for widows and orphans will not be undertaken until the National Thrift Institute has organized insurance of this kind and the insurance can be effected through it.

While the Club will not be able to admit as members persons more than 50 years of age, it will set aside 5 per cent. of the net annual produce for the formation of a Fund out of which it will eventually provide pensions for the largest possible number of persons who are 75 years of age, have no other income or pension, and are resident in or near the town of Lanaja.

The Scholarship Fund, to which 5 per cent. of the net annual produce will be allocated, will be devoted to paying for the professional training of boys who show special aptitude and are the sons of labourers or small farmers who are members of the Club.

The 10 per cent. of the net produce set aside for unemployment insurance will be distributed in equal parts amongst the members of the Club who are labourers. The sum so allotted to a member will be considered as

a premium paid by him for insurance against unemployment, and the Club will be entitled to receive a subvention from the State equal in amount to the premiums. The Club will also solicit subsidies from the local authorities. Further to provide against unemployment, it will arrange, as far as possible, that the work on the land shall be done in periods of unemployment.

Part III: Credit

ITALY.

LAND CREDIT.

SOURCES :

DECRETO-LEGGE-LUCIOTENENZIALE 22 GIUGNO 1919, N. 1242, CHE AUTORIZZA GLI ISTITUTI DI CREDITO FUNDIARIO AD ACCORDARE NELLE REGIONI DANNEGGIATE DALLA GUERRA MUTUI IPOTECARI PER RICOSTRUIRE O RIPARARE FONDI URBANI E PER METTERE IN ISTATO DI COLTIVAZIONE QUELLI RUSTICI. — *Gazzetta Ufficiale del Regno d'Italia*, No. 180. Rome, 29 July 1919.

REGIO DECRETO-LEGGE 2 SETTEMBRE 1919, N. 1709, CHE DÀ FACOLTA ALL'ISTITUTO ITALIANO DI CREDITO FUNDIARIO DI COSTITUIRE NELLA PROPRIA SEDE UNA SEZIONE AUTONOMA PER IL CREDITO ED IL RISPARMIO. — *Gazzetta Ufficiale del Regno d'Italia*, No. 231. Rome, 29 September 1919.

REGIO DECRETO-LEGGE 30 NOVEMBRE 1919, N. 2443, CHE ERIGE IN ENTE MORALE L'ISTITUTO DI CREDITO FUNDIARIO DELLE VENEZIE, CON SEDE PRESSO LA CASA DI RISPARMIO DELLA CITTA DI VERONA, E NE APPROVA LA CONVENZIONE COSTITUTIVA INSIEME AL RELATIVO STATUTO. — *Gazzetta Ufficiale del Regno d'Italia*, No. 1, Rome, January 1920.

REPORTS FOR 1918 OF THE LAND CREDIT INSTITUTIONS WORKING IN ITALY.

§ 1. RECENT PROVISIONS AS TO LAND CREDIT.

Among the numerous provisions made of late under the impulse of the new exigencies created by the war, are some closely connected with land credit. It seems expedient to give some account of these, so that the reader may be kept *au courant* with the development in Italy of this important branch of credit, which we have already described in our issue of July 1916.

Some of these provisions are general in character, being applicable to all the institutions carrying on operations in the country, others only to single institutions.

Among the former those which are contained in the Law of 22 June 1919, No. 1242, are worthy of special notice. This law authorises land credit institutions to grant mortgage loans in the districts devastated by war, for the purpose of rebuilding or repairing town property, or to

put rural holdings in a state of cultivation and of productivity. Such loans are payable in one sum, or by instalments, according to whether the work of restoring the property is already completed, or is still unfinished. They are paid in bonds bearing interest not exceeding 5 per cent, and may generally be granted up to three-fifths of the actual value of the mortgaged property. In no case may the sum to be lent exceed the amount strictly necessary to restore the property to its original condition. The loan may be repaid by half yearly instalments, paid regularly for a period not less than 10, nor more than 50 years. The half yearly instalments include the interest on the sum lent and the amortization charge, the tax on personal property, and all other taxes and the charges due to the institution which has granted the loan.

A mortgage given as guarantee for a loan made for the purpose of restoring landed property, takes precedence of every other mortgage, and even of privileged credit.

The application for a loan must be accompanied by documents proving the legal ownership of the damaged property. The proof of title may also be made by producing a "decree attributing ownership" issued by of the Commission for ascertaining and liquidating war damages. The decree, indicating the object of the loan, is deposited for fifteen days in the office of the secretary of the commune, and special notice that it has been so deposited must be given to the public. The person desiring the loan must have a copy of this notice published in the *Foglio degli annunci legali*. When fifteen days have passed after the publication and insertion of the notice, without any legal opposition having been made at the office of the credit institution to the granting of the loan, the owner of the property is authorised to draw up the contract, and to effect the mortgage on the property for which he requires a loan. The mortgage, unopposed, takes full effect against any person representing legal rights to the mortgaged property, of whatever nature such rights may be, or in whatever form exercised. For loans obtained for the repair or rebuilding of farmers' houses the mortgage given as security applies also to a corresponding part of the rural holding annexed to them. The attribution of ownership above mentioned does not prejudice legally ascertained rights which may belong to others. But if such persons have not notified to the Society their opposition in the terms and with the forms required, they cannot impugn the legality of the transaction.

The Lieutenantcy decree of 10 January 1918, No. 33, declared the suspension until one year after the conclusion of peace of the payment of the half-yearly instalments of the mortgage loans on landed property situated in the communes of Venetia occupied by the enemy, or evacuated, and also fixed the method of distributing the suspended instalment-among those remaining, should the borrower not prefer to prolong the duration of the loan to a maximum limit of 50 years, exclusive of the first years not exceeding 10, that may have passed since the loan was contracted.

A Lieutenantcy decree of 9 November 1916, No. 1505, had already

introduced into the legislation of the Kingdom of Italy an important reform of the office for the deposit of contracts (*istituto della trascrizione*). By another decree of 21 April 1918, No. 575, some preceding provisions were extended and others co-ordinated, thus taking a further step towards the realisation of a complete system of publicity for rights in relation to land.

Two Lieutenantcy decrees regulated the right to compensation for damage caused by the war; the first, of 8 June 1918, No. 780, affirmed this right, the second, of 16 November 1918, No. 1750, defined the conditions and circumstances under which compensation can be granted.

By similar provisions respecting landed property the State will furnish the necessary funds for restoring property damaged by the war to its full productive efficiency. The importance of these provisions is manifest, especially as regards those holdings which were already mortgaged before the war.

Among provisions respecting single institutions, an interesting and useful innovation was introduced by the decree of 2 November 1919, No. 1709, to extend the functions of the Italian Land Credit Institute (*Istituto Italiano di Credito Fondiario*), the largest of the kind in Italy, for the benefit of certain branches of economic action, which at the present moment are in need of special assistance. This decree, in fact, empowers the above-mentioned institution to establish at its own headquarters a Credit and Savings Section (*Sezione per il credito e risparmio*) with the object of encouraging the improvement of agriculture, irrigation, building and other works of public utility. The new Section will be autonomous, with a balance sheet of its own, a board of management and a council. It will have a special loan fund of 10 million francs, half of which will be invested in Treasury bonds, in other State securities, in securities guaranteed by the State or in land bonds, the other half in loans to provinces, communes, consortia or other bodies, or to private individuals, secured by a first mortgage on landed property.

The Section is authorized to receive deposits for a fixed period, or on current account, to a total amount not exceeding 100 million francs. One third of the deposits must be invested in the above mentioned securities, and the remaining two-thirds in short term operations to be determined by the rules of the Section, and in loans and current accounts guaranteed by first mortgages or other sufficient securities.

These limitations and safeguards, together with other rules drawn up for the management of the Section, will ensure promptitude and safety in its working in the interests of agrarian economy.

It is worthy of note that in July 1919 the Savings Banks of Verona, Padua, Venice, Udine, Treviso and the Federal Credit Institution for the Restoration of Venetia (*Istituto federale di credito per il risorgimento delle Venezie*) incorporated by a decree of 30 November 1919, No. 2443, constituted themselves into a new and important body, the Land Credit Institution of Venetia (*Istituto di Credito Fondiario delle Venezie*) having its headquarters at the office of the Savings Bank of Verona.

This Institution begins with a guarantee fund of 10 million francs paid up by the above mentioned banks. Its object is to carry on land credit according to existing laws and regulations, and by mortgage loans to advance the funds required for the restoration of landed property in districts devastated by the war according to the provisions of the decree of the 27 March 1919, No. 426, as to granting compensation for war damage. It is empowered to work, not only within the same limits as the Land Credit Section of the Savings Bank of Verona, but also in the territory ascribed to the Federal Credit Institution for the Restoration of Venetia, the foundation of which we announced in our issue of February 1920.

The above are the chief provisions made during the last few years with regard to land credit. We shall now briefly describe the work of land credit institutions in 1918.

§ 2 THE WORK OF THE LAND CREDIT INSTITUTIONS IN 1918

The seven land credit institutions carrying on operations in Italy granted loans in 1918 to the total amount of 29,844,977 liras, which was a little larger than the amount of the loans granted in 1917 (24,998,500 liras). The total amount repaid was considerably larger, reaching the sum of 46,467,361 liras. In all the institutions the amount repaid was higher than the loans granted.

This result was due to the general economic condition of the country. In fact the abundance of money amongst the agricultural classes accelerated repayments and caused a decreased demand for new loans. In 1918, moreover, there was again little activity in the building trade and so very few loans on the mortgage of urban house property were applied for. It is, however, to be anticipated that an increase in the number of such applications will result from the need for restoring house property in the districts where military operations took place and in the liberated provinces.

The largest total amount of loans was granted in 1918 by the Italian Land Credit Institution, which made 96 loans, at 4 and 4 1/2 per cent. interest, amounting to 9,314,000 liras (as compared with 77 loans, amounting to 6,505,500 liras in 1917); of these loans 48, amounting to 5,875,000 liras, were guaranteed by mortgages on rural property, and 48, amounting to 3,438,500 liras by mortgages on urban property. The sums employed in the extinction of mortgage debts at higher rates of interest and for the redemption of dues exceeded 3,000,000 liras, equal to 33 per cent. of the total amount of loans granted during the year. The mortgage loans outstanding on 31 December 1918 numbered 2,686 and amounted to 186,207,979 liras. They were guaranteed by mortgages on property valued at 461,413,292 liras, or 89,000,000 liras more than twice the amount of the outstanding loans.

Next in order of importance comes the Land Credit Section of the Savings Bank of the Lombard Provinces, from whose balance sheet it appears that the new loans, issued in the form of bonds, which were granted in 1918 were somewhat fewer in number and smaller in amount than those grant-

ed in the previous year. In fact, while in 1917 they numbered 130 and amounted to 9,822,500 liras, in 1918 they only numbered 112 and amounted to 7,435,000 liras. Of these loans 21, amounting to 1,070,500 liras were guaranteed by mortgages on rural property, 88, amounting to 6,132,500 liras by mortgages on urban property and three, amounting to 232,000 liras by mortgages on property partly urban and partly rural. On 31 December 1918 the outstanding loans numbered 4,053 and amounted to 198,626,674 liras, showing a diminution, as compared with the previous year, of 137 in number and 7,697,654 liras in amount.

The annual report of this Institution shows that the chief cause of this decrease is to be found in the abnormal conditions of the whole building trade, owing to the continued high cost of labour and of building materials, a great hindrance to the investment of capital in building. "In these days, too, rural property has no need to have recourse to credit, because of the large profits from the sale of the various kinds of produce, and further, this state of affairs is favourable to voluntary repayment." Many borrowers have availed themselves of the fact that the price of 3 $\frac{1}{2}$ per cent bonds though relatively high, still remains somewhat below par, to make voluntary repayments, and thus to have the advantage of the difference between the cost of purchase and the nominal value (500 francs) calculated by the Institution on bonds used in making the original capital payments. This is the reason why repayments in bonds which in 1917 amounted to 7,526,000 liras rose in 1918 to 9,530,500 liras.

The third place, as regards value of mortgage loans granted in 1918 is taken by the *Monte dei Paschi* of Siena, with 6,127,977 liras (of which 1,107,500 liras are advanced under the special rules relating to land credit). In February 1919 this old institution opened a branch in Rome, with the view of developing land and agricultural credit in that province which offers so large a sphere of action.

The *Istituto delle Opere Pie di S. Paolo* in Turin granted 71 loans amounting to 5,977,500 liras, of which 65, amounting to 5,708,000 liras, were guaranteed by mortgages on urban property; four amounting to 216,000 liras by mortgages on rural property, and two, amounting to 53,500 liras, by mortgages on property partly urban and partly rural. A large part of the loans was devoted to paying off old debts to the *Istituto* itself and to other creditors.

By the Land Credit Section of the Savings Bank of Bologna loans were granted in 1918 for 944,500 liras. On 31 December the outstanding loans were 1,615 in number and amounted to 50,828,378 liras.

The Savings Bank of Verona lent 46,000 liras. From its foundation in 1902 to the end of 1919 this institution granted 1,062 mortgage loans in bonds amounting to 32,237,000 francs.

The Sardinian Land Credit Institution (*Credito Fondiario Sardo*) granted in all between the 30 August 1902 and the 30 September 1919 loans to the amount of 3,640,500 francs.

It must finally be pointed out that the great demand for land bonds for the repayment in advance of loans caused even in 1918 a persistent

upward tendency in the prices of such securities in the market. The quotations at the end of the year showed a considerable increase in the price of some typical bonds, more accentuated than in the case of other kinds of securities. This explains the preference for land bonds as representing a safe kind of investment.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

BRAZIL.

"LE CRÉDIT FONCIER DU BRÉSIL ET DE L'AMÉRIQUE DU SUD." — *L'Illustration économique et et financière*. Paris, 17 April 1920.

The *Crédit Foncier du Brésil et de l'Amérique du Sud*, which began work in the course of the year 1910, has for its object all transactions in mortgage loans or advances on mortgage securities. These operations are not limited to private persons; they may include governments, federal or provincial, municipalities and corporations.

The activities of the Society were at first confined to Brazil, but in 1912 they were extended to all the other countries of South America. Outside its direct operations in land credit, the Society has participated in similar enterprises, notably in the *Banco el Hogar Argentino*, and the *Banque hypothécaire du Brésil*. The *Banco el Hogar Argentino* is a land credit undertaking based on the principle of mutuality, and the *Crédit Foncier* of Brazil holds about 40,000 *El Hogar* shares, which appear in its balance sheet at their purchase price of 28,868,000 francs. The *Banque Hypothécaire* of Brazil might have been a dangerous rival of the *Crédit Foncier* of Brazil, which therefore, together with a friendly group, has purchased the control of that bank.

The capital of the *Crédit Foncier* of Brazil is at present 50 millions of francs, represented by 100,000 shares of 500 francs, 275 francs per share having been paid up since 1918. At the same time a certain number of shares is completely paid up, because the shareholders have the power of paying in advance the amount not called up. There are besides 20,000 founders' shares. The Society has issued in addition 70 millions of francs in bonds. The transactions effected since the origin of the Society are shown (in thousands of francs) in the table (page 352).

Mortgage loans showed a rapid increase up to 1914; but the financial and monetary crisis which occurred in Brazil at the commencement of hostilities, arrested operations of this kind. Later, Brazil became one of the

Loans granted from 1910 to 1918 (in thousands of francs).

Year	Mortgage loans	Loans to states and municipalities	Loans on securities	Loans on goods	Total loans
1910.	9,930	—	2,511	907	13,348
1911.	28,784	—	564	833	30,181
1912.	34,804	—	697	2,183	33,634
1913.	43,882	6,408	1,794	803	52,792
1914.	44,299	6,524	255	731	51,809
1915.	43,063	6,455	759	658	50,930
1916.	37,623	8,930	2,873	956	50,382
1917.	36,147	8,023	3,789	1,695	50,254
1918.	32,758	7,178	4,334	5,565	49,830

greatest purveyors of Europe, and her economic situation began perceptibly to improve, so that the demand for mortgage loans diminished, and repayments in advance increased. However, the Society was able to find compensation by extending its loans on securities and on merchandise.

Respecting loans to states and municipalities there has been little change since 1913.

FRANCE.

THE PART PLAYED BY THE BANK OF FRANCE IN AGRICULTURAL CREDIT. — *Journal d'Agriculture pratique*. Paris, 25 fév. 1920.

The annual general meeting of the shareholders of the Bank of France was held in Paris, 19 January. The statement of its transactions shows that the total amount of dues paid to the State in the course of the year 1919 to be applied to agricultural credit, reached the sum of 37,075,181.75 francs.

The total amount of the sums placed by these dues, since the law of 1897, at the disposal of agricultural credit, at present exceeds 239 millions, exclusive of an advance of 40 millions to be repaid in 1920, but renewed by a law of 20 December 1918.

GERMANY.

FIFTY YEARS OF BANKING OPERATIONS BY THE "LANDSCHAFT" OF EAST PRUSSIA. — *Deutscher Oekonomist*, No. 1917. Berlin, 20 September 1919.

The "Landschaft" of East Prussia, formed in 1788, celebrated, on 1 October 1919, the fiftieth anniversary of the establishment of its Bank.

The Loan Bank of the "Landschaft," established in 1869, has steadily increased in importance from one decade to another. It has made possible and encouraged the increase of agricultural credit, especially as regards small, even the smallest, holdings throughout the country, wherever the business of the bank extends. The source of the present development of the bank must be sought in the establishment of a system of branches extending through the province, and in the institution of a savings-bank recognised by law, which guarantees the property of minors.

By its increasing profits this bank has reinforced the funds of the "Landschaft," and found the necessary means of increasing its foundation capital.

It has at present 7 principal agencies, 26 branch establishments, and 76 local offices. Its foundation capital has risen from 600,000 marks to 7 million marks, its balance sheet total in round numbers has reached the sum of 219,000,000 marks, the total volume of its business (incomings and outgoings) amounts to 6,909,000,000 marks, and the total sum of its deposits and savings has increased, amounting now to about 200,000,000 marks. The profits handed over to the "Landschaft" since its constitution reach a sum total of more than 9,000,000 marks.

ITALY.

1. THE AGRICULTURAL CREDIT INSTITUTE FOR LATIUM. — R. Decreto, 28 dicembre 1919, n. 3638, che apporta modificazioni allo Statuto del "Credito Agrario per il Lazio". In the *Gazzetta Ufficiale del Regno d'Italia*, No. 51. Rome, 2 March 1920.

The Law of 21 December 1902, No. 542, which instituted in Rome the Agricultural Credit Institute for Latium (*Credito Agrario per il Lazio*) gave it power to carry out credit transactions but only for farming purposes. Considering, however, that it had at its disposal ample funds accruing from an influx of deposits, it seemed desirable that this bank should be in a position to employ these funds in agricultural improvements, thus contributing to the intensification of cultivation in the province of Rome. Therefore, a Lieutenantcy Decree, 12 June 1919, No. 997, authorized the granting of mortgage loans for the above-mentioned purposes.

By a Royal Decree, 28 December 1919, which introduced new modifications into the Rules of the *Credito Agrario per il Lazio*, mortgage loans for agricultural improvements and transformations from one kind of cultivation to another may be granted to consortia and institutions legally constituted which have their headquarters and work in the province of Rome, as well as to private agriculturists residing in that province. Credit transactions for farming purposes may on the other hand be carried out in any one of the following ways: (1) rediscount of bills issued by agriculturists to agricultural consortia, agricultural banks, agricultural loan banks, co-operative distilleries, cellar societies, so-

cieties for the collective sale of produce, and other legally constituted bodies, giving preference to those which are co-operative in form; (2) discount of bills issued by such bodies directly, either to provide means for purchasing agricultural requisites on commission or to make payments in advance in the case of collective sales of agricultural produce; (3) discount of bills issued by farmers residing in localities where intermediate bodies either do not exist or cannot undertake such business; (4) discount of bills issued directly by farmers in the above-mentioned circumstances, guaranteed by the pledging of agricultural produce; (5) discount of bills issued directly by intermediate bodies to represent bills which the institution holds and is authorised to rediscount; (6) opening of current accounts with intermediate bodies instead of discounting their bills; (7) advances made to private agriculturists, or to the consortia and institutions above mentioned, on the security of State securities, securities guaranteed by the State, land bonds or treasury bonds.

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2. SPECIAL, AGRICULTURAL, LOANS. — Decreto ministeriale 12 settembre 1919 per la concessione di sovvenzioni straordinarie di credito agrario per la coltivazione dei cereali, legumi e tuberi commestibili. In the *Gazzetta Ufficiale del Regno d'Italia*, No. 234. Rome, 2 October 1919.

In continuation of various decrees already promulgated with the view of encouraging national agriculture by means of credit, further provisions were added by the ministerial decree of 12 September 1919, regarding the agricultural season of 1919-20 and that immediately following, viz. 1920-21. We give a brief summary of these.

The provisions in the ministerial decrees of 6 October 1918 and 17 May 1919, to which reference has already been made in this Review, for granting special advances for the cultivation of cereals, vegetables and edible tubers are extended to the years 1919-20 and 1920-21. For other crops, as well as for the utilization and transformation of produce, and for the purchase of tools, the new decree empowers agricultural credit institutions authorized by special laws, to make to proprietors and tenants in emphyteusis, or tenant cultivators with contracts of any kind, advances in the proportion and for the period required in each case by the extension and intensity of cultivation and by the length of the season of production and the quantity and quality of the produce to be utilized and transformed.

With certain special exceptions, each to be considered on its own merits by the Ministry of Agriculture, advances for the purchase of cattle must not exceed 10,000 liras for each farm, and in the case of several farms worked by the same agriculturist, no more than two advances may be granted. To obtain these advances it is compulsory to insure the cattle in respect of which the institution granting the credit has the privileges given by Art. 1 of the Decree of 20 July 1919, No. 1414. When an advance

is desired for the purchase of machines, the application must be accompanied by the written opinion on the subject by the holder of the itinerant professorship of agriculture, and a copy of the contract of purchase or invoice, indicating the price of the machine.

The repayment of loans, whether for cattle or machines, must be made by annual instalments for a period not exceeding five years. No further loan can be granted to an agriculturist of whom it is proved that he has not used for their legitimate purpose loans granted to him on other occasions, or who is not for any reason trusted to make right use of the advances. The rate of interest must not exceed 5 per cent. To ensure the attainment of the objects of the decree, credit institutions may, if they consider it desirable, ask for proofs and verifications from the holders of itinerant professorships of agriculture.

- 3 A CREDIT CONSORTIUM FOR PUBLIC WORKS — R. Decreto, 2 settembre 1919, n. 1627, che istituisce, con sede in Roma, un ente denominato "Consorzio di Credito per opere pubbliche", determinandone l'ordinamento. In the *Gazzetta Ufficiale del Regno d'Italia*, No. 222, Rome, 17 September 1919.

A Decree of 2 September 1919, No. 1627, instituted in Rome a *Consorzio di credito per opere pubbliche* with the object of granting loans for carrying out public works, guaranteed by the cession of annuities by the State, and by assignment of charges which are collected in the same manner as direct taxes by provinces, communes, consortia and the *Opera Nazionale per i Combattenti* (1), the charges in the last case being those in respect of drainage, irrigation or other improvement works carried out by the *Opera Nazionale*. The Consortium is composed of the Deposit and Loan Bank (*Cassa dei depositi e prestiti*), the National Insurance Institute (*Istituto Nazionale delle Assicurazioni*), the National Social Insurance Institution (*Cassa Nazionale delle Assicurazioni Sociali*) and any savings-bank which may request admission. The Consortium is legally incorporated, has autonomous management, and is under the supervision of the Ministry of the Treasury. It has a capital of 100 millions of liras, subscribed by the various bodies composing it, and capable of being raised to 150 millions. Like the Land Credit Institute (*Istituto di credito fondiario*) and with guarantees equally efficacious, the Consortium is authorized to issue bonds to the amount of the loans granted, and such bonds are placed on the same footing as the communal and provincial credit bonds issued by the Deposit and Loan Bank, are negotiable on the stock exchange, and are included among the securities on which money may be advanced by banks of issue.

This important provision was made with the idea of profiting by the

(1) See our issue of June-July 1919, page 416.

large amount of capital available in the country, and turning it in the direction of public works, for which the funds at the disposal of the Deposit and Loan Bank, one of the most important components of the Consortium, are not always sufficient.

SWITZERLAND.

1. THE LOAN BANK OF SOLEURE IN 1919. — I.V. Geschäftsbericht der Direktion der Solothurnischen Leihkasse for 1919. Soleure, 1920.

The fifty-fifth report of the Loan Bank of Soleure, lately published, contains figures relating to its business in 1919.

In that year its balance-sheet total was increased by 818,166 francs, as compared with 1918, and the total business done in 1919 showed an increase of 4,789,232 francs as compared with the previous year.

The progress of the bank during the last five years is shown below :

	Balance-sheet total — Fr.	Total business done — Fr.
1915	3,845,511	13,841,321
1916	4,394,948	18,763, 18
1917	5,123,917	27,969,152
1918	7,052,197	38,766,801
1919	7,871,364	43,556,033

The mortgage credit given by this bank amounted on 31 December 1919 to 1,302,896 francs. All the property mortgaged was in the canton of Soleure.

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2. THE MORTGAGE BANK OF AARGAU (BRUGG) IN 1919. — Aargauische Hypothekenbank Brugg. 70. Jahresbericht 1919. Brugg, 1920.

The loans granted by the Mortgage Bank of the Canton of Aargau, at Brugg are divided into loans and bonds guaranteed by mortgages and loans on the security of moveables and loans granted to communes. The first, loans and mortgage bonds, form the preponderant part of the credit granted by this bank, and in fact they had risen by 31 December to 31,721,914 francs, against 2,478,224 francs in loans on the security of moveables and loans granted to communes. The balance-sheet total of this bank on 31 December 1919 was 75,412,342 francs and the amount of business done in 1919 was 610,852,877 francs.

* * *

3. THE MORTGAGE BANK OF THE CANTON OF GENEVA IN 1919. — Septante-deuxième rapport de la Caisse hypothécaire du Canton de Genève présenté par la Commission de Direction Général au Conseil d'État et aux Conseils Municipaux des Communes du Canton de Genève, Année 1919. Geneva, Impr. Jules Privat, 1920.

At the beginning of 1919 the General Management Committee of the Mortgage Bank of the Canton of Geneva resolved to fix a rate of interest at $5\frac{1}{4}$ per cent on land bonds, and $5\frac{1}{2}$ per cent on loans, continuing the rate of $5\frac{1}{4}$ per cent on loans that had fallen due. It was also decided to establish a savings-bank.

Towards the end of the year the Committee was again obliged to consider the subject of the rate of interest. The rate on bonds was raised to $5\frac{1}{2}$ and that on loans to $5\frac{3}{4}$; that on loans that had fallen due remained at $5\frac{1}{2}$.

The total amount of mortgage loans outstanding at the end of 1918 was 137,769,930.40 francs. In 1919 the new loans granted amounted to 18,150,745 francs and the loans repaid to 7,545,443.90 francs. The increase in the amount of the loans in 1919, as compared with 1918, was therefore 10,605,301.10 francs, which brings up the sum total of mortgage loans at the end 1919 to 148,375,312.50 francs corresponding to 5,280 mortgages.

Agricultural credit amounted on the 31 December 1919 to 1,264,949 francs, a diminution of 113,443 francs as compared with 31 December 1918.

The profit and loss account in the balance sheet of 1919 closed on the 31 December with a profit of 225,249 francs. The balance sheet total amounted to 168,594,352 francs.

Part IV: Agricultural Economy in General

DENMARK.

VALUE AND DISTRIBUTION OF RURAL PROPERTY.

OFFICIAL SOURCE:

WURDERING TIL EJENDOMSKYLD PR 1 JULI 1916 (*Estimate of the Effects of the Tax on Real Estate of 1 July 1916*) — Copenhagen, 1918.

The Danish Office of Statistics has published the results of the general valuation of real estate made in 1916, under the law of 22 December 1915 and for the purposes of the land tax.

The total value of the real estate in the whole kingdom was found to be 7,952 million crowns, distributed over 439,000 properties. Rural districts contributed to these totals 4,470 million crowns and 334,000 properties.

TABLE I. — *Number and Value of Landed Properties in the Rural Districts.*

	Number			Value (in thousands of crowns)		
	1916	1909	1904	1916	1909	1904
Zealand	65,838	79,119	71,296	1,313,014	981,203	898,547
Bornholm.	5,035	4,644	4,405	63,473	51,721	47,398
Laaland Falster . . .	18,152	16,580	15,762	327,200	223,579	205,495
Fyen	46,063	42,232	39,812	616,403	472,648	443,200
Islands . . .	155,088	141,575	131,335	2,320,090	1,729,151	1,594,640
South-East Jutland . .	61,776	56,421	52,211	831,111	617,931	546,484
North Jutland	56,143	50,985	46,804	615,739	445,595	389,710
South-West Jutland . .	61,164	54,657	49,620	703,335	482,907	410,536
Jutland . . .	179,083	162,063	148,635	2,150,205	1,546,433	1,346,730
Kingdom . .	334,171	303,638	279,970	4,470,295	3,275,584	2,941,370

Table I shows how the value of the rural properties is distributed in the various districts of Denmark, and compares the data obtained in 1916 with those obtained by the two corresponding valuations of 1904 and 1909.

The total value of the landed property in the rural districts increased between 1904 and 1916 by 52 per cent; but this increase was not progressive, for between 1904 and 1909 it was 334,000,000 crowns, that is about 67,000,000 crowns a year, and between 1909 and 1916 it was 1,195,000,000 crowns or, on an average, 171,000,000 crowns a year. It should also be noted that the increase in value differed very appreciably in the various parts of the kingdom, passing for the whole period from a minimum of 32.9 per cent. in the department of Svendborg to a maximum of 80.8 per cent. in the department of Ribe.

The percentages of increase were distributed as follows over the various districts:

	From 1904 to 1909	From 1909 to 1916	From 1904 to 1916
Zealand	9.2	33.8	46.1
Bornholm	9.1	22.7	33.9
Laaland-Falster	8.8	46.3	59.2
Fyen	6.6	40.4	39.1
Islands	8.4	34.2	45.5
South-East Jutland	13.1	34.5	52.1
North Jutland	14.3	38.2	58.0
South-West Jutland	17.6	45.7	71.3
Jutland	14.8	39.0	59.7
Kingdom	11.4	36.5	52.0

The landed properties of rural districts were divided in the valuation into three separate groups, namely (a) Farms (*Landensjendomme*); (2) Forests valued separately; (c) Other landed property.

§ 1. FARMS.

The number of farms was found in 1916 to be 184,723 as against 178,382 in 1909 and 171,798 in 1904. Their value was 3,405,511,000 crowns in 1916, as against 2,499,383,000 crowns in 1909 and 2,308,014,000 crowns in 1904. That is, this value increased by 8.3 per cent. between 1904 and 1909, by 36.3 per cent. between 1909 and 1916 and by 47.6 per cent. between 1904 and 1916.

The average value of a farm in 1916 was 18,436 crowns, the maximum average value being in the district of Laaland-Falster, 31,058 crowns, and the minimum in North Jutland, 14,195 crowns. The average area of a farm was 17.5 hectares, the maximum average area being in South-West Jutland, 22.2 hectares, and the minimum in Fyen, 13.1 hectares. The average value of a hectare was 1,051 crowns in 1916 as against 765 crowns in 1909 and 711 in 1904. The maximum average value of a hectare in 1916 was in Laaland Falster, 1,797 crowns, the minimum in South-West Jutland, 645 crowns.

The statistics divide the farms into two groups — the large farms, those having an area of one *tøndre Hartkorn* (1) or more, and the small farms or those having a less area. The number, area and value of the farms in these two groups is shown in the following table.

TABLE II. — *Distribution of Large and Small Farms in 1916.*

District	Number		Area (hectares)		Value (1000 crowns)	
	Large farms	Small farms	Large farms	Small farms	Large farms	Small farms
Zealand	19,674	20,491	519,435	71,638	757,719	127,850
Bornholm	1,556	1,980	39,148	7,815	41,435	11,906
Laaland-Falster . . .	4,689	3,864	136,659	11,125	240,106	25,530
Fyen	10,865	12,116	265,397	35,510	400,303	78,933
Islands . . .	36,784	38,451	960,639	126,088	1,439,563	244,239
South-East Jutland .	15,361	19,319	478,593	154,333	518,044	136,928
North Jutland . . .	12,326	22,480	445,884	186,208	345,061	149,022
South-West Jutland .	14,099	25,930	540,864	346,777	366,536	206,118
Jutland . . .	41,786	67,702	1,465,341	683,318	1,229,641	492,068
Kingdom . . .	78,570	106,153	2,425,980	813,406	2,669,204	736,307

The distribution of the large farms according to the number of *tøndre Hartkorn* they contain, as compared with the similar distribution shown by the earlier valuations, is particularly interesting. Table III shows that while the total number of these farms increased progressively, their total area

(1) The *Tøndre Hartkorn*, the "barrel of hard corn," is a cadastral measure instituted for the purposes of the land-tax and based on the soil's normal yield. Six and a half *tøndre Land* (1 *tøndre Land* = 0.55 hectare) of the most fertile land represent one *tøndre Hartkorn*. But the average *tøndre Hartkorn* is equal in the islands to 10 9, in Jutland to 26.6 and over the whole of Denmark to 18 *tøndre Land*, that is to about 10 hectares.

diminished and the number of the least extensive of them (1 to 4 *tøndre Hartkorn*) increased to the detriment of the larger (4 to 8 *tøndre Hartkorn*). There is here a clear indication of the tendency to a further subdivision of property.

TABLE III. — *Distribution of Large Farms by Area.*

Class	NUMBER			AREA IN HECTARES			VALUE IN CROWNS		
	1916	1909	1904	1916	1909	1904	1915	1909	1904
Farms of 1 to 2 <i>Hartkorn</i>	26,569	23,421	21,814	463,040			404,458		
» » 2 » 4 »	26,554	24,474	23,589	658,692	2,130,676	2,148,707	648,567	1,623,692	1,528,036
» » 4 » 12 »	24,484	25,067	26,605	947,542			1,151,984		
» » 12 and more »	1,963	2,011	2,067	356,706	380,800	391,613	464,195	354,257	341,511
Total . . .	78,570	75,603	74,075	2,425,980	2,511,476	2,540,320	2,669,204	1,977,948	1,869,547

The differences in the average value per hectare of the several classes of farms is very interesting :

		1916	1908	1904
			(crowns)	
Farms of 1 to 2	<i>tøndre Hartkorn</i> . . .	873	611	511
» » 2 to 4	» » . . .	986	685	625
» » 4 to 12	» » . . .	1,216	876	827
» » 12 and more	» » . . .	1,301	930	874
	Total . . .	1,100	787	736

It is seen that over the whole country, the average value of the hectare increases with the area of the farm. It should however be noticed that this does not hold good for every part of the kingdom : in the provinces of the Islands the maximum average value per hectare is found in the farms of from 1 to 2 *tøndre Hartkorn*.

The position of the small farms at the date of each valuation appears in Table IV (page 362).

The considerable increase in the total number of small farms — one of about 3,400 from 1909 to 1916 — does not exactly reflect the real increase, which must have been larger, for in the valuations of 1904 and 1909 properties with very small areas of land attached to them were included, whereas in 1916 they were left out as they could not be looked upon as real farms. This partly explains the diminution shown in the number of the less extensive farms.

TABLE IV. — *Distribution of Small Farms by Area.*

	Number			Area in hectares			Value in crowns		
	1916	1909	1904	1916	1909	1904	1916	1909	1904
Holdings of 0.55 to 3.3 hec.	37,262	41,039	41,552	72,857	80,197	79,642	171,992	149,772	135,927
" 3.3 to 10 "	45,497	40,585	36,368	253,838	224,813	202,927	328,741	227,214	184,669
" 10 and more "	23,394	21,155	19,803	486,711	451,767	426,614	235,574	144,448	117,871
Total . . .	106,153	102,779	97,723	813,406	756,777	709,183	736,307	521,434	438,467

Taken together, the data confirm the evidence of a tendency towards the development of small holdings already supplied by the figures as to the large farms, for they show that, together with the increase in the number of the small farms, there was in their total area an increase between 1904 and 1916 which amounted to more than 100,000 hectares.

The average value per hectare of the small farms of each class was as follows at the time of the several valuations :

	1916	1909	1904
	(Crowns)		
Farms of 0.55 to 3.3 hectares	2,361	1,867	1,706
" 3.3 to 10 "	1,395	1,012	910
" 10 and more "	484	230	277
Total . . .	905	689	618

The considerable differences found in the several groups evidently depend on the fact that in the smallest farms the value of buildings forms the very preponderant part of the total value, but that this preponderance decreases as the farm's area increases.

§ 2. WOODS.

The woods separately valued comprise only part of the total afforested area, namely 239,000 hectares thereof. The total afforested area was estimated in 1912 as 233,000 hectares. The findings of the valuation of 1916, as compared with those of the two preceding valuations, were as follows :

TABLE V. — *Number, Area and Value of Woods.*

	Number			Area (in hectares)			Value (in thousands of crowns)		
	1916	1907	1904	1916	1909	1904	1916	1909	1904
Zealand	348	308	404	71,114	69,047	68,062	53,659	43,556	41,495
Bornholm	32	27	29	5,954	5,882	5,847	1,615	1,354	1,251
Laland-Falster	66	62	93	11,942	12,176	12,108	9,920	9,720	9,667
Fyen	195	168	159	17,325	17,069	16,378	17,725	14,676	13,647
Islands	641	565	685	106,325	104,174	102,395	82,919	69,306	66,030
South-East Jutland	337	262	216	34,787	32,010	32,681	15,772	12,863	11,107
North Jutland	221	136	107	33,741	29,313	24,523	8,135	6,008	4,904
South-West Jutland	370	260	211	63,005	51,303	48,334	8,049	6,843	6,279
Jutland	928	658	534	131,533	112,626	105,538	32,856	25,714	22,290
Kingdom	1,569	1,223	1,199	238,758	224,800	208,833	115,775	95,040	90,320

The average value per hectare in 1916 was 465 crowns but differed appreciably from district to district, varying from a minimum of 140 crowns per hectare in Fyen to a maximum of 1,024 crowns per hectare in South-West Jutland. In 1909 the average value per hectare was 423 crowns; in 1904 it was 434 crowns. Thus in 1916 it had increased by 14.7 per cent. since 1909 and by 11.8 per cent. since 1904.

TABLE VI. — *Number and Value of other Holdings of Landed Property.*

	Number			Value in thousands of crowns		
	1916	1909	1904	1916	1909	1904
Agricultural holdings of less than 55 hectare	1,373	2,332	—	4,944	5,013	—
Gardens	1,618	1,282	—	16,630	10,710	—
Mills	1,771	2,053	—	30,874	35,554	—
Dairies	1,322	1,237	—	24,359	17,983	—
Mixed industrial and agricultural holdings	1,326	—	—	20,713	—	—
Other property connected with farms	140,469	117,266	—	851,489	612,317	—
Total	147,879	121,170	108,151	949,009	682,477	564,098

§ 3. OTHER LANDED PROPERTY.

Under this head various groups of landed property in country districts are united — properties legally exempt from the tax on real estate (property of the State, communes, schools, hospitals, etc., gymnastic and meeting grounds), dwelling-houses, agricultural holdings of less than 0.55 hectare, gardens, mills, dairies, factories, hotels, etc. mixed agricultural and industrial holdings, areas not built upon, other property. We reproduce in Table VI (page 363) figures only as to the number and value of the groups which have an agricultural character and of the total area in this category.

FRANCE.

AGRICULTURAL COMMISSARIATS DURING THE WAR.

OFFICIAL SOURCES :

CHAMBRE DES DÉPUTÉS, II^e LÉGISLATURE, SESSION ORDINAIRE DE 1919. RAPPORT FAIT AU NOM DE LA COMMISSION CHARGÉE D'EXAMINER LE PROJET DE LOI PORTANT FIXATION DU BUDGET ORDINAIRE DES SERVICES CIVILS DE L'EXERCICE 1919 (MINISTÈRE DE L'AGRICULTURE ET DU RAVITAILLEMENT, 1^{re} SECTION: AGRICULTURE), PAR M. ADRIEN DARIAC, DÉPUTÉ.

Laws, decrees, and ministerial circulars analysed for the purposes of this study.

The effort made by France during the war to increase her agricultural production has been set forth in this review ever since the outbreak of hostilities (1), and the solutions which events called for have been described from time to time as they were come to. We have noted the opening, on 15 March 1915, of a National Office for Rural Labour (2), and we have followed its developments (3). Then, after September 1915, came the subsidies to promote motorcultivation (4), which led to the formation of several syndicates for traction ploughing (5). As these measures, in spite of the valuable results attained, were insufficient, the next step taken was to place professional bodies at the service of those farmers who found difficulty in farming their lands. This was the purpose of the decrees of 2 and 9 February 1916, for the establishment of Com-

(1) *Agricultural Efforts in France during six months of War. International Review of Agricultural Economics*, May 1915, p. 81.

(2) *International Review of Agricultural Economics*, July, 1915, p. 120.

(3) D^o. February 1916, p. 129; November 1916, p. 127; October 1917, p. 79 August 1918, p. 670.

(4) D^o. November 1915, p. 118.

(5) D^o. February 1916 p. 28; May 1916, p. 48; August 1916, p. 43; February 1917, p. 36.

munal and Cantonal Agricultural Committees (1). A step further was taken in an effort to ensure by law the cultivation of abandoned farms (2), which was entrusted specifically to special co-operative associations (3), to which the government made important loans (4). Finally, the reconstruction of the liberated provinces has called for special measures which we have also studied (5). We will now describe the work performed by the Agricultural Commissariats.

A decree dated 24 December 1917 provides for three agricultural commissariats:

- (1) the Commissariat of cereals, vines, and forests;
- (2) the Commissariat for agricultural production in North Africa and the French colonies;
- (3) the Commissariat for the production of potatoes, pulse, live stock, etc.

A. *The Commissariat for cereals, vines, and forests.* — By a decree dated 14 January 1918 departmental committees for agriculture were established for the purpose of informing the Agricultural Commissariat of the wishes of the farmers, and on the measures to be taken in each district to ensure the best use of available labour, tractor engines, fertilizers and seed. They also played a leading part in assigning loans for the resumption of farming operations on abandoned lands.

To supplement the information supplied in the reports submitted by members of the departmental committees, and with a view to ascertaining the farming situation on French territory, a circular was sent out on 1 February 1918, to all the mayors of France, with a request that they fill in a form showing the number of farms under cultivation, the number of those abandoned or neglected, stating the area of abandoned land susceptible of coming again under cultivation. They were also asked for accurate statistics as to the reduction in the area of land sown to bread cereals, and for precise data as to labour supply.

The information assembled by the Agricultural Commissariat from the answers received shows the following situation:

Area of France: 53,000,000 hectares.

Cultivated area in 1913: 36,542,000 hectares.

Area of farms not cultivated in 1914: 54,725 hectares

Area of » » » 1918: 103,731 »

Uncultivated areas in 1914: 145,634 hectares

» » » 1918: 598,327 »

Besides the areas which have been entirely abandoned, large tracts

(1) *International Review of Agricultural Economics*, April 1916, p. 87.

(2) *D°*, November 1916, p. 123.

(3) *D°*, July 1917, p. 22; June 1918, p. 469; January-February 1919, p. 30; March 1920, p. 166.

(4) *D°*, September 1918, p. 739.

(5) *D°*, October 1918, p. 823; January-February 1919, p. 78; February 1920, p. 129.

have been left fallow on most farms. The following table shows the reduction in areas sown to the several bread cereals:

Ascertained reductions in sown areas (1914-1918).

			1914	1915	1916	1917	1918
Wheat.	Surface	(hectares)	6,000,358	5,489,230	5,030,080	4,224,450	4,820,743
	Yield	(quintals)	70,936,005	60,630,200	55,767,320	39,482,160	53,025,350
Rye	Surface	(hectares)	1,057,551	931,600	869,580	810,270	780,035
	Yield	(quintals)	11,147,140	8,420,160	8,471,580	6,993,930	
Millet.	Surface	(hectares)	119,103	107,350	100,195	91,610	87,000
	Yield	(quintals)	1,353,553	1,098,190	1,079,230	879,960	1,029,480
Oats	Surface	(hectares)	3,590,150	3,262,590	3,147,450	3,118,560	2,924,810
	Yield	(quintals)	40,200,340	34,625,160	40,223,810	34,462,570	27,414,810
Barley.	Surface	(hectares)	720,460	637,500	623,380	723,930	569,040
	Yield	(quintals)	9,756,150	6,920,790	8,334,690	8,980,910	6,119,000
Buckwheat	Surface	(hectares)	452,071	432,790	400,545	409,747	
	Yield	(quintals)	5,324,012	4,645,574	2,730,410	4,272,820	
Maize	Surface	(hectares)	450,099	378,340	350,840	351,030	
	Yield	(quintals)	5,722,940	4,344,500	4,225,440	4,118,760	2,220,900

Such considerable reductions must entail a notable decrease in yield, and consequently an increase in the imports of foodstuffs. To offset this reduced yield the Commissariat, acting jointly with the department of the Under-Secretary of State for Supplies, distributed large quantities of seed, either for cash payments, or to be returned in kind after the harvest.

The Commissariat has kept in touch with the several sections of the Ministry of Agriculture, more especially to secure the detachment to the land of farmers mobilised in the inland zones, or the grant of leave to agricultural specialists so as to ensure the better distribution of the tractors belonging to the government motor-cultivation service, etc.

For the resumption of farming on abandoned lands the Commissariat has drawn up accurate statistics showing the number of farms which have been entirely abandoned, neglected, or the lease of which is coming to an end. At the same time it has taken steps for resettling people on the land. Farmers who desire to settle once more on a farm fill in a special blank at the Commissariat on which they state their wishes in full with reference to the region in which they wish to settle and the size of the farm they wish to take. A list of four or five farms complying with the requirements stated is then transmitted to the applicant, who applies

direct to the landlord or the mayor to arrange the conditions of tenancy. Only when obstacles are raised by landlords or tenants does the prefect proceed to requisition the abandoned areas.

A decree of the 7th September, 1918, extends the functions of the Commissariat to enterprises for the utilisation of forest resources. The Commissariat had to supervise the carrying out of the programme for the utilisation of woods in the interests of national defence and of the allied armies, and, in case of need, to take the requisite measures for the protection of French forests.

During the first years of the war, more especially since the timber required by the Allied armies was supplied by French forests, felling of trees was carried out on a large scale without method or control from the point of view of forestry technique. This led to harmful exploitation. In certain districts the forests have been devastated and private interests have not been respected. To avoid this destruction of forest wealth and natural beauty, an inventory of available resources, classified according to head-quarters for the utilisation of the same, was drawn up. A decree of 26 September 1918 laid down the rules for this census. It also provided in each department for the formation of an advisory committee to consider the complaints made by communes, public bodies, and private owners, with reference to the decisions taken by the forestry service as to available resources in their forests, to the means for supplying local industries with wood, and, generally, the measures to be taken for the protection of forestry interests.

B. Commissariat for agricultural production in North Africa and the French colonies. — The purpose of this Commissariat is "to develop and intensify the production of essential foodstuffs in North Africa and the colonies."

The Commissariat has brought to bear its personal activity on this question by journeys in North Africa and French West Africa, by visiting farms and plantations, and by carrying on an active propaganda with the colonists and groups of planters, appealing to their patriotism and urging them to extend their crops and intensify production, by seeking out new lands suited to cultivation, and by studying with the local administrative authorities the means for utilising them.

While the commissary carries on this work, the offices working under him second his efforts by facilitating the colonists in the purchase of seed (Manitoba wheat, potatoes, soya beans, castor-oil seed) and by supplying them with fertilizers and chemical products used in agriculture; taking measures for the transport of ploughs, tractors, etc., ordered either in France or in America, and for the delivery of petrol, etc. required for the working of these implements; by the purchase of farm tractors for cultivating large tracts of arable land; by fixing the price of the products to be purchased by the food supply or commissariat authorities (cereals, castor-oil, rubber); by supplying sacks, barrels, cans, etc., for carrying farm products; by overcoming difficulties due to custom-house formalities, etc.

The labour question was dealt with by the same offices, acting jointly with the army general staff, and bye-laws were drafted for mobilized colonists and specialized workers in agricultural industries. Detachment of units for farm work was organized in Algeria and Tunis on a scale adequate to the needs of these colonies. Agricultural specialists were granted leave of absence by turn. Mobilized growers of oleaginous plants also obtained special leave. On the other hand, the Commissariat hunted up specialists who could organize shifts of engineers and drivers of farm-tractors. It received applications from farmers desirous of undertaking cultivation in the North African colonies, supplied them with information, and placed them in touch with the proper local authorities. Finally, it devoted its attention also to questions bearing on after war food supplies.

C. *Commissariat for the production of potatoes, pulse, livestock, etc.* — This Commissariat originated from a central bureau for the production of potatoes, pulse and edible roots, dating back to the 27th December 1916. It consists of three sections, as follows :

1st Section : Production of potatoes and pulse. — The purpose of this section is to develop, organize, and intensify the production of these several plants. Its main work consists in supplying growers with the requisites of production : seed-potatoes, fertilizers, sacks etc. for moving their crops.

This section has limited its efforts exclusively to questions relating to production : it does not interfere in matters concerning food-supply and consumption except in so far as they may react on production. For instance, this section approached the Minister of Agriculture to secure a rise in the purchase price of growing tubers so that said prices should remain at a normal level as compared with those paid for other crops, and so as to secure a fair ratio between the cost of production and the market price. It also had some considerable correspondence with the transport services to ensure that the requisite means for supplying farmers with seed potatoes be always available. By means of special agents in the railway stations it sees that the rolling stock required for this purpose is not used for other purposes, and that the most pressing demands receive first attention.

2nd Section : Livestock, forage and industrial crops. — This section has undertaken the study of measures for the preservation of the national livestock, and the best means to ensure their observance.

For this purpose it has carried out a series of investigations into the condition of forage crops throughout the country, the condition of livestock, the nature and supply of the several animal products. Among these we call attention to a special inquiry to determine the available supply of animals for slaughtering at different times of year, the degree of fattening of said animals in the several producing areas, etc., so as to regulate requisitioning and to fix the contribution to be supplied by the several localities on a scientific basis.

This section has had to deal with matters affecting the dairy industry, more especially in regulating the production of cheese and other dairy products, the measures required to ensure the supply of fresh milk, etc.

This section also undertook the work of preserving the livestock from districts evacuated at the time of the enemy offensive in the spring of 1918.

The evacuation of these animals was effected partially in accordance with a plan prepared by this section. The following measures had been taken, dividing the front, from the sea to the Vosges, into seven sections :

- (1) purchasing centres were formed in the departments where evacuation had to be carried out ;
- (2) routes were fixed, without touching the main roads, from said purchasing centres to the quarantine stations ;
- (3) every 10 or 20 kilometres along these routes resting stations were provided with the consent of the mayors ;
- (4) at the several termini, quarantine stations were provided for animals suspected of having foot and mouth disease.

The animals were finally placed in station stock-yards where they remained while awaiting their final destination. In these stock-yards the animals were classified and numbered. Descriptive catalogues were also drawn up.

They were divided into two main groups : pure bred stock suited for reproduction, and animals without the requisite qualities for this purpose. The first kind were placed in care of farmers ; the others were either sold or sent to the army slaughter-houses, so as to ensure their being placed to the most profitable use and thus protecting the interests of the National Treasury.

3rd. Section : Market garden and fruit crops, supply of seeds. —

This section attends to the development of market and fruit gardening, the production of industrial plants, the utilization of such products, the supply of seed, etc.

It supplies seed importers and shippers with special information ; secures for them transport facilities, ensuring the rapid transit of seed, and places growers in touch with dealers.

This section attended to procuring for France several kinds of seed (Spanish haricot beans, lentils, broad beans, Algerian peas, Russian beet-root seeds), which it sold to growers on advantageous terms.

NEW ZEALAND.

LAND SETTLEMENT BY DISCHARGED SOLDIERS.

SOURCES (OFFICIAL):

THE DISCHARGED SOLDIERS SETTLEMENT ACT, 1915.

THE LAND LAWS AMENDMENT ACT, 1915.

THE DISCHARGED SOLDIERS SETTLEMENT AMENDMENT ACT, 1916.

THE DISCHARGED SOLDIERS SETTLEMENT AMENDMENT ACT, 1917.

THE REPATRIATION ACT, 1918.

REGULATIONS UNDER THE DISCHARGED SOLDIERS SETTLEMENT ACT, 1915. Department of Lands and Survey. Wellington. 1919.

NEW ZEALAND OFFICIAL YEAR BOOK, 1915, 1916, 1917, 1918 Wellington, 1916, 1917, 1918, 1919.

DISCHARGED SOLDIERS SETTLEMENT REPORT FOR THE YEAR ENDED 31st MARCH 1919. Department of Lands and Survey. Wellington. 1919.

Provision for the settlement on the land of discharged soldiers was first made in New Zealand by the Discharged Soldiers Settlement Act of 1915. Amending acts were passed in 1916 and 1917 and a slight further amendment was contained in the Repatriation Act of 1918.

Two classes of persons are entitled to the full benefits of the Acts—(1) those who were members of a New Zealand Naval or Expeditionary Force, served beyond New Zealand in connection with the European War, and have returned to New Zealand and (2) those who were resident in New Zealand immediately prior to the commencement of the War, and have served with some portion of the British Naval or Military Forces not raised in New Zealand. In addition members of an Expeditionary force who had been classed as medically fit for service beyond the seas and were serving in a military training camp on 12 November 1918 (the date of the cessation of hostilities) are entitled to certain benefits under the Amendment Act of 1917.

§ 1. THE LAND AVAILABLE FOR SOLDIER SETTLEMENT.

The Governor was empowered by the Act of 1915 to set apart by Proclamation any area of Crown land or of settlement land for selection by discharged soldiers. Under the Amendment Act of 1917, private land can be purchased for disposal to discharged soldiers provided it has been ap-

plied for by one or more such persons and the owner has made a written offer to sell it.

All Crown lands that are deemed suitable for selection under ordinary farming conditions have been set apart for discharged soldiers and have usually been proclaimed under the Discharged Soldiers Settlement Act. This also applies to private land purchased by the Land Purchase Board under the Land for Settlements Act; and in addition national endowment land and other endowment lands that are suitable for soldier selection are made available for that purpose, although the tenure in the latter cases can only be a leasehold one. At 31 March 1919, the areas proclaimed totalled 507,890 acres, but a large portion was pastoral country, only suitable for holding in large areas which would need the expenditure of a fair amount of capital to develop to advantage. Amongst the discharged soldiers, however, are many who possess the necessary capital

§ 2. TENURES UNDER WHICH LAND MAY BE SELECTED.

Lands set apart for selection by discharged soldiers may be allotted under the ordinary tenures of the Land Acts and the Land for Settlements Act (1), or under special tenures the regulations for which are made from time to time by Governor-General by Order in Council

(a) *Ordinary Tenures.*

The ordinary tenures are as follows.

Purchase for Cash. -- The applicant is required to pay one-fifth of the purchase-money at the date of sale, and the balance within thirty days from the date of the approval of the application.

Occupation with Right of Purchase. -- The settler obtains a license to occupy the land for 25 years at a rental equal to five per cent. of the capital value of the land. After he has held the land for six years he has a right to purchase it, provided he has complied with the conditions laid down in regard to residence and improvement. If the licensee does not acquire the freehold prior to the expiration of the term of 25 years he has a prior right to a renewable lease.

Renewable Lease under the Land Act. -- Under the Land Act leases are given for a term of 66 years, with a perpetual right of renewal. The rent payable is 4 per cent. of the capital value of the land. The lessee has no right to acquire the freehold.

Renewable Lease under the Land for Settlements Act -- Leases granted under the Land for Settlements Act are for a term of 33 years, with a perpetual right of renewal. The rent is 4 ½ per cent. of the capital value.

(1) For accounts of the system of land settlement under these acts, see the article on "The Administration of the Crown Lands in New Zealand" in our issue of September 1911 and the article on "Closer Settlement in New Zealand" in our issue of June 1916.

The lessee has a right to purchase the freehold (on the deferred-payment system if desired) at any time during the currency of the lease

Though only discharged soldiers can apply for lands proclaimed under the Discharged Soldiers Settlement Act, 1915, all the provisions of the Land Acts and the Land for Settlements Act apply to them if they select lands under the ordinary tenures

(b) *Special Tenures.*

The special tenures, which are intended for the settlement of men who have lost a limb or who have been seriously wounded, but who will be able to make a living on a small farm by means of fruit-farming, poultry-raising, dairying, etc., are as follows

Purchase by Deferred Payment. — The purchaser pays 5 per cent. of the price of the land on the approval of his application, or such lesser amount as the Minister of Lands may in any case determine. He then receives a license to occupy the land, which provides for the payment of the balance of the price by equal annual instalments, extending over such period as the Land Board determines in each case. The licensee pays interest half-yearly at the rate of 5 per cent. per annum on the unpaid balance of the purchase price. He has the right to pay at any time the whole or any part of the price then remaining unpaid. When the price is paid in full with all interest due, a certificate of title is issued to the purchaser.

Residence on any land held under license to occupy is compulsory and must commence in the case of bush or swamp land within four years, and in the case of open or partly open land within one year, from the date of the license. It must be continuous during the whole of the remainder of the term of the license. The Land Board may, however, at its discretion dispense with compliance with these conditions.

Except with the consent of the Land Board and the approval of the Minister of Lands, land purchased under this system cannot be transferred until the expiry of ten years after the date of the sale.

Lease with Right to Purchase. — Land may be allotted by lease, for such term, with or without the right of renewal, as the Land Board may in each case determine. In the case of lands acquired under the Land for Settlements Act, the term of the lease and the successive terms of renewal of the lease must not exceed 33 years, in the case of other lands, the terms must not exceed 66 years.

The value of the improvements to be effected and the conditions of residence are left to the discretion of the Land Board, which determines them in each case.

The annual rent payable in the case of private lands acquired under Section 3 of the act of 1917 is 5 per cent. of the capital value; in all other cases, it is an amount not exceeding $4\frac{1}{2}$ per cent. of the capital value.

If, on the expiry of the lease, a renewal is not granted, the lessee will be entitled to receive from the Crown the value of all existing improvements of a permanent character effected or paid for by him or by his predecessor

in title. In case of renewal of the lease, the rent payable will be determined by the Land Board, and will be based on a valuation of the land as at the date of the renewal, exclusive of the value of improvements.

Except in the case of "national endowment lands," the lessee may, at any time during the continuance of the lease, acquire the freehold of the land comprised in the lease at a price which is determined by the Minister of Lands before the lease is granted. The purchase may be made, if desired, by the system of deferred payments.

§ 3. ADVANCES FOR THE ACQUISITION OF LAND.

Under Section 2 of the Discharged Soldiers Settlement Amendment Act, 1917, financial assistance may be given to discharged soldiers to enable them to purchase private or Native land, to acquire by assignment or transfer the lease of any land administered by a Land Board, or to discharge mortgages on land held by them.

The maximum amount which may be advanced to any one person is £2,500, unless the purpose of the advance be the acquisition of a dwelling on other than rural land, when not more than £1,000 can be advanced. Repayment of advances may be secured by a flat mortgage for a period not exceeding ten years, with interest at five per cent per annum, or by an instalment mortgage extending over a period of 36 $\frac{1}{2}$ years, with an annual charge of 6 per cent, which includes interest and sinking fund.

§ 4. FACILITIES FOR ACQUIRING LAND UNDER THE LAND LAWS.

By Section 24 of the Land Laws Amendment Act, 1915, it was provided that any duly authorized agent of a member of a New Zealand Expeditionary Force might apply on his behalf for any land that might be open for settlement under the Land Act, 1908, or the Land for Settlements Act, 1908, at any time while he was absent from New Zealand on military service. Such applicants, and also applicants who had at any time been members of a New Zealand Expeditionary Force, were given the same preference at any ballot for land as is accorded to married men who have families dependent on them or single men who have been twice unsuccessful at a ballot. Further the age-limit of 21 years was abolished in the case of soldier applicants.

§ 5. THE LANDS ACQUIRED BY DISCHARGED SOLDIERS.

The following Table shows the total lands acquired from the Crown by discharged soldiers up to 31 March 1919.

*Lands acquired from the Crown by Discharged Soldiers
up to 31 March 1919.*

	Sale (including Deferred Payment)			Lease and License			Totals	
	Number	Area	Price	Number	Area	Annual Rental	Number	Area
		Acres	£		Acres	£		Acres
Under the Discharged Soldiers Settlement Act, 1915, and Amendment Acts	22	2,257	8,021	874	355,011	84,378	896	357,268
Under other Acts.	3	349	332	182	356,920	12,302	185	257,265
Total . .	25	2,606	8,353	1,056	611,931	96,680	1,081	614,537

The Crown tenants who held land prior to enlisting in the Expeditionary Force comprised 77 selectors, holding 115,137 acres.

In addition to the soldiers who had acquired land from the Crown, 263 had been given advances amounting £207,235 to enable them to purchase the freehold of private lands, to acquire interests in leases or to discharge mortgages on their holdings. The sum of £212,583 had also been advanced to 529 urban and suburban residents to enable them to purchase their own homes.

§ 6. FINANCIAL ASSISTANCE TO SOLDIER SETTLERS.

The Discharged Soldiers Settlement Act of 1915 gives the Land Board power to assist settlers with respect to the clearing, fencing, draining and general improvement of lands disposed of under the Act (including the erection of buildings) and the purchase of implements, stock, seeds, plants, trees and such other things as may be necessary for the successful occupation of the land. Advantage has been taken of this provision to facilitate the settlement of applicants possessing little or no capital. While it is inadvisable to place such men on large holdings, it has been the endeavour of the Government to settle them on holdings suitable to their means. Many such men have been placed on small dairy farms and provided with stock and implements to enable them to obtain monetary returns from their holdings from the first month after they enter into possession.

The power to make advances for the purposes mentioned was extended by Section 2 of the Discharged Soldiers Act Amendment Act, 1917, to include all discharged soldiers who own freehold land or are the lessees or licencees of any land administered by a Land Board.

In the case of a house to be built on other than rural land, the maximum advance which can be made is £750; in other cases it is £500 (not more than £250 of this being for a dwelling and other buildings) unless there be special circumstances in which the amount would be inadequate, when the Minister of Lands may authorize an additional advance not exceeding £250.

Advances are secured by a first mortgage over the land, with the addition, at the option of the Minister, of a bill of sale over the stock, implements, etc. The rate of interest is 5 per cent.

Up to 31 March 1919, advances amounting to £337,736 were made to 900 discharged soldiers.

A substantial portion of this amount was earned by the settlers themselves as remuneration for their labour in improving their lands instead of arranging for the work to be done by contract. This enabled them to be financed during the period when their lands were not in a position fully to support them.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

ARGENTINA.

SALES OF RURAL PROPERTY IN 1918 AS COMPARED WITH PRECEDING YEARS. —

— Rural Real Estate Transactions in Argentine, 1918 in *The Review of the River Plate*. Buenos-Aires 19 September 1919.

A recent report drawn up by the Direction of the Office of Rural Economy and Statistics of the Argentine Republic shows the transactions affecting rural property during the year 1918, as compared with those of preceding years.

The area of the rural property which changed hands in the course of 1918 was 6,435,518 hectares, and its value amounted to 349,360,782 pesos m/n, whereas in 1917 the area sold was 5,656,504 hectares, the value of which was 263,100,652 pesos.

The price per hectare, which was 46.5 pesos in 1917, rose to 54.2 pesos in 1918.

As may be seen the sales were remarkable in the latter year, as much for the extent of land transferred as for its value. We may also say that the high average of the transfers is not diminishing. During the ten years 1907-1916 the average area of land sold per annum was 8,142,770 hectares and the average value 284,128,721 pesos.

The report in question, with reference to these averages, which denotes a noteworthy activity in land sales at rather high prices, remarks that it

would be erroneous to conclude that this phenomenal activity of the market is due exclusively to the progress of the cultivation of rural lands and to their increased productiveness. It points out that it is in great measure due to commercial activity, which in other countries is connected with portable securities, but in the Argentine Republic with land, which owing to speculation alone, passes in a short space of time through the hands of numerous proprietors.

The report next furnishes the following data, which refer to the sales of rural land during the quinquennial periods comprised between 1901 and 1918.

Years	Area • in hectares	Value in pesos m/n
1901-1905	45,690,564	643,185,117
1906-1910	47,884,330	1,222,316,912
1911-1915	37,897,902	1,518,743,423
1906-1918	18,432,666	918,338,620
	149,905,162	4,302,684,072

These figures, however, as observed in the report, like those previously given, although they refer to a longer period of time, cannot of themselves offer any adequate means of determining the exact unitary value of land in Argentina, because they are not completed by other data which would be very useful for the purpose, such, for example, as the number of proprietors, and the value of buildings and plant comprised in the sale price. At any rate we may say that the ascending movement in sales, which began about twenty years ago, still continues in Argentina and there is still a tendency to a higher valuation of rural property.

FRANCE.

1. AN OFFICIAL EXPERIMENT IN AGRICULTURAL REGIONALISM. — Annexe n° 4 à la circulaire du 30 juin 1919 relative à l'application par les offices agricoles régionaux de la loi du 6 janvier 1919 sur l'intensification de la production agricole, adressée par le Ministre de l'Agriculture et du ravitaillement aux présidents des Offices agricoles départementaux et régionaux.

By a decree of 1 March 1918 the territory of France was divided into eight great regions for the general inspection of agriculture, viz. North, West, East, Centre, East-central, Central, Southwest and South.

By the law of 6 January 1919, relating to intensification of agriculture, regional offices were constituted, one for each of the above mentioned regions (1).

Lastly a decree of 14 May 1919 designated the locality where each office should be fixed.

(1) See our issue of June-July 1919, p. 426.

The country expects that by the extension of regionalism and by decentralisation a new impulse will be given to the various branches of national activity — agriculture, commerce, and manufactures — and men of distinguished ability are endeavouring to find the best methods of grouping districts and interests.

The system of division of land adopted on 1 March 1918 for the grouping of departments into agricultural regions, could not, however, possibly escape criticism, nor could any idea on the subject meet with unanimity of opinion, or be of a nature to be accepted without discussion.

Every system of division must necessarily be to a certain extent arbitrary, especially if the point of departure be an administrative unit, the department for example, the limits of which are not generally defined according to any principle of an agricultural nature. But this point of departure was necessary, and under present circumstances any division of territory into agricultural regions which should not coincide with the division into departments would meet with great practical difficulties in application. An agricultural region is therefore composed of a group of departments.

It is logical that the formation of such a group should be based on the old division into provinces, by which districts having characteristics in common were already united. The division into regions follows as far as possible the old system, but by grouping several provinces together, each region constituting a whole formed of "agricultural districts" clearly defined.

Sometimes these agricultural districts overlap one another. It could not be otherwise, for investigations as to animal or vegetable products cannot be confined within administrative limits. Besides, though these districts may resemble one another in some respects, they differ in others, and it is impossible to assimilate them from every point of view. In any case, these are the eight regions as defined by the decree of 1 March 1918:

1. *North*. — This land of fertile plains, with great farms for the cultivation of cereals, of plants required in manufactures, and of market garden produce, comprises Normandy (Seine Inferieure, Eure, Orne, Calvados, Manche), the Paris basin (Seine, Seine-et-Oise, Oise, Eure-et-Loir, Seine-et-Marne, and the southern part of Aisne, viz. the Ile-de-France and part of Beauce) and the North properly so called (Nord, Pas-de-Calais, Somme and the northern part of Aisne, viz. Flanders, Artois and Picardy).

2. *East*. — This region of hills and valleys is formed of Lorraine (Meuse, Meurthe-et-Moselle, Vosges and restored Lorraine), Alsace, and Champagne (Ardennes, Marne, Aube, Haute-Marne, to which Haute-Saône has been joined because of commercial relations and facility of communications).

3. *West*. — This region comprises Brittany (Ille-et-Vilaine, Côtes du Nord, Finistère, Morbihan, and Loire-Inférieure), Maine and Anjou (Maine-et-Loire, Mayenne and Sarthe), and Poitou (Vienne, Deux-Sèvres, Vendée).

4. *Centre*. — In the Centre are grouped the region of Berry (Indre-et-Cher); the middle valley of the Loire (Loiret, Loire-et-Cher and Indre-et-Loire, to which was added Yonne because of its crops); Nivernais and Bourbonnais (Nièvre and Allier); lastly Marne and Limousin (Creuse and Haute-Vienne).

5. *East Central*. — This region is formed of Franche-Comté with the cheese producing hills of Jura (Doubs and Jura); Savoy and Dauphiny, or generally speaking, the Alps (Upper Savoy, Savoy, Isère, Hautes-Alpes); the Lyonnais (Rhône) and lastly Burgundy (Côte-d'Or, Saône-et-Loire, Ain), in a word the upper part of the Rhone basin.

6. *South West*, or Garonne valley, Guienne and Gascony, the Charentes (Charente and Charente-Inférieure); Bordelais (Gironde and Dordogne); the Garonne valley (Haute-Garonne, Tarn-et-Garonne and Lot-et-Garonne); the Pyrenees (Hautes-Pyrénées and Basses-Pyrénées, Gers and Ariège) and the Landes form the South West.

7. *Central*. — The Central region comprises Auvergne and Forez (Puy-de-Dôme, Cantal, Haute-Loire and Loire), Causses and the neighbouring districts (Tarn, Aveyron, Lot, Lozère, and Corrèze).

8. *South*. — This region, of which the chief characteristic is the predominance of the vine and the olive, comprises Provence (Bouches-du-Rhône, Var and Alpes-Maritimes); the lower valley of the Rhone and that of the Durance (Drôme, Ardèche, Vaucluse and Basses-Alpes); and the vine-growing south (Gard, Hérault, Aude, Pyrénées-Orientales and Corsica).

In each of the departments comprised in these regions a departmental office has been constituted in accordance with the law of 6 January 1919. The work of these offices is co-ordinated by a regional office, which also carries on such investigations or works as may be of interest to several departments. The regional offices are established in the following localities; Paris for the North, Nancy for the East, Rennes for the West, Bourges for the Centre, Lyons for the East-Central, Bordeaux for the South-West, Clermont-Ferrand for the Central, and Marseilles for the South.

The locality of the regional office is not so important as might at first sight be supposed. It is only a place of meeting where the records of the regional office are kept. It is chosen with regard to its geographical position, as near the centre of the region as possible, and also with regard to facilities of transport. The meetings of delegates from departmental offices to the regional office are not invariably held at the premises of the office in the same locality. It is optional to hold such meetings in different towns, or sometimes in rotation among the principal towns of the region. Lastly, the regional offices are so organised as to permit the formation of inter-regional groups. For instance, should a breed of cattle extend through the territory of several regions, the offices of such regions may take measures for the improvement of the breed, and act in concert to ensure the carrying out of such measures. This has been done in the case of the Charolais breed of cattle, the geographical area of which comprises the departments of Nièvre, Saône-et-Loire, Allier, part of Cher, Yonne,

and Côte-d'Or, thus overlapping three regions ; and in the case of the Limousin breed found in Haute-Vienne, Vienne, Creuse, Dordogne and part of the Charentes, also extending into three regions. As to vine-growing, it will be desirable not to separate from Burgundy, which belongs to the East-Central region, the vineyards of Yonne, which only produce a small part of the agricultural wealth of this department, which belongs to the Central region because of the similarity of crops and cattle. In the Charentes the milk industry has developed into co-operative groups, and the Federation to which they belong extends its influence over several departments: Charente, Lower Charente, Vienne, Deux-Sèvres, Vendée, and Indre-et-Loire, thus working in three regions. The beet industry belongs not only to the North region, but also to the East and Centre, through certain districts adjoining the North which belong to the departments of Ardennes, Marne, Aube, Yonne and Loiret. As for the liberated regions, it is only too clear that they have economic interests in common ; it therefore seems necessary that there should be an understanding between five departments of the North region (Nord, Pas-de-Calais, Somme, Aisne-et-Oise) and five of the East (Ardennes, Marne, Meuse, Meurthe-et-Moselle and Vosges).

It is the same with many mutualist groups which have been formed among neighbouring departments with regular commercial relations and facilities of communication. Doubs and Jura, for instance, are, through certain associations, connected with the East region. The departments of Dordogne, Haute-Vienne and Corrèze, belonging to three different regions, also have agricultural associations in common. It is clear that the regional offices ought to work in concert, and co-operate continually in the study of the various inter-regional questions, endeavouring to solve them as may be best for the interests involved, without taking administrative divisions into account.

Where objects, analogous because arising out of identical economic and agricultural conditions, must be attained, the agricultural associations must also co-ordinate their efforts, group themselves, and constitute among themselves regional or inter-regional federations. These agricultural groups will naturally have their headquarters in the centre of an agricultural district. Thus in the South West region, Bordeaux, the seat of the regional office, will also be the appropriate seat of the vine-growing associations of Bordelais, the Charentes and Armagnac, while at Toulouse the agricultural associations of Garonne and the Pyrenean departments will be united.

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2. STATISTICS OF LANDOWNERS. — *La main-d'œuvre agricole*, Paris, April 1920.
CAZIOT: *La valeur d'après-guerre de la terre*, Paris, 1919.

The results obtained from the appraisalment of landed property, other than house property, made by the Ministry of Finance in 1913, show that there are 7,520,992 land-owners in France.

The importance of this figure is apparent when compared with the number of cadastral units (*cotes foncières*), with the number of inhabitants (total municipal population), and with the number of households as shown in the census of 1911.

The following figures are obtained :

560	land-owners	for every	1,000	cadastral	units ;
195				1,000	inhabitants ;
656				1,000	households.

The following variations in relation to the number of cadastral units occur in the several departments :

The number of land-owners per 1,000 cadastral units is only 364 in the Aube and 319 in the Yonne ; it is

from	404	to	500	in	19	departments
	501		600		34	"
	601		700		20	"
	701		800		11	"

Comparing the number of land-owners to population the following variations occur :

The number of land-owners per 1,000 inhabitants only amounts to 22 in the Seine and 90 in the Seine-Inférieure ; it is

from	103	to	150	in	7	departments
	151		200		15	"
	201		250		25	"
	251		300		23	"
	301		350		9	"

The ratio stands at 351 in Savoie, 352 in the Gers and the Haute-Savoie, 357 in the Basses-Alpes, 364 in the Ariège, and 377 in the Lot.

Lastly, the ratio of land-owners to households is as follows :

The number of land-owners for every 1,000 households is lowest in the Seine (58) ; it is

between	323	and	500	in	7	departments
	501		600		7	"
	601		700		14	"
	701		800		10	"
	801		900		14	"
	901		1,000		17	"
	1,000		1,250		12	"

It amounts to 1,282 in the Lot, 1,291 in the Lozère, 1,326 in Savoie, 1,364 in Haute-Savoie, and 1,377 in the Ariège.

It is probable that these figures are now considerably exceeded.

The Ministry of Finance has recently published the statistics of duty paid on the sale of real estate since 1913.

In 1913 these payments only amounted to 183,208,500 francs ; in 1918 they rose to 204,103,000 francs, and in 1919 to 538,296, 000 francs. Now, as the house-rent crisis has acted as a deterrent on business in town real-estate, one is led to conclude, with M. Caziot, that this enormous rise in receipts from duty is accounted for by rural real estate.

What is the proportion of new land-owners ? It is hardly possible to reckon it with accuracy. M. Caziot has shown that in almost all sections farmers are buying the lands they till. In Brittany the purchasers are the cultivators. In the Nivernais and in Bourbonnais the purchasers are also tenant farmers and produce sharing farmers ; and this holds good also for the central departments. In Auvergne the land-owners are bought out by their farm-tenants ; in Bourgogne two thirds of the real estate passes into the ownership of the tenant farmers. In the departments of Dombes and Bresse, in the district round Lyons, small holdings of from 10 to 30 hectares farmed by a family without the help of servants sell at 60 to 100 per cent. above their value in 1914. In Provence and in all the Southern districts the tendency is for landed property to be further sub-divided ; the peasants invest their bank-notes, in which they have scant confidence, in land. In the departments of Languedoc and Roussillon, with the exception of some speculators who purchase big estates, the buyers are the tenants of the lands.

The result is that if the number of land-owners does not increase in an absolute sense, since the former land-owners are replaced by their tenants, nevertheless the ownership of the land is being profoundly modified. Hundred of thousands of peasants have become land-owners. No social transformation is more important than that which has taken place in France in 1919. The rise in the price of farm products has had the happy result of making the people who have remained on the land its actual owners.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1 42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 ore) (Denmark, Norway Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tcherwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Mastri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	983/64 d.	at par
1 Len (100 statinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4 d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25.261/64 d.	at par
1 Milreis, gold (Portugal)	=	45.519/64 d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	185.015/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8 d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$ of £1 (gold)	
1 Talari (20 piastre) (Egypt)	=	45.1 1/32 d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64 d.	at par
1 Zentner (Germany)	=	112.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

UNITED STATES.

THE PRINCIPLES OF CO-OPERATIVE MARKETING AS
ILLUSTRATED BY CALIFORNIA EXPERIENCE.

SOURCE:

LLOYD (John William): Co-operative and other Organised Methods of Marketing California Horticultural Products. — *University of Illinois Studies in the Social Sciences*, University of Illinois, Urbana, Vol. VIII, No 1. March 1919.

In our issues of July 1918 and June-July 1919 we have dealt with the development of co-operation for the sale of agricultural produce as shown in the annual reports of the State Market Director of California (1). We now purpose to set forth the principles which should underlie co-operative marketing, as given by Mr. J. W. Lloyd in a monograph published by the University of Illinois. In his preface the author tells us that this study was completed in March 1917 and refers to conditions as they then existed. Since then new organisations have been formed and the conditions brought about by the war have led Government greatly to extend its participation in the field of food distribution. The principles laid down and the opinions expressed in the following pages are taken from Mr. Lloyd's study.

(1) *International Review of Agricultural Economics*, "The Position of Agricultural Co-operation in California in 1917," July 1918. "Co-operation for the Sale of Produce in California," June-July 1919.

§ 1. FUNDAMENTAL PRINCIPLES OF CO-OPERATIVE MARKETING.

The author formulates eleven fundamental principles on compliance with which depends the success of co-operative marketing, as illustrated by Californian experience.

1. *Organisation for marketing purposes can be most readily effected when conditions in an industry are such that the need of improvement is quite generally apparent to those engaged in the industry.* — Prices below the cost of production, frequent "red ink" returns in the case of perishable products, accumulation of unsold products, depreciation of property values, and threatened financial disaster have been the conditions prevalent in the California citrus fruit, deciduous fruit, raisin, almond, and cantaloupe growers' industries prior to the organisation of co-operative marketing. For instance, in the citrus industry conditions had become so bad that in 1893-1894 about half the shipments of the season resulted in "red ink," and many of the growers actually had to pay money, in addition to their entire crops of fruit, for the privilege of marketing them. As a result of the failure of speculative shippers to sell the year's crop at a fair price, a convention of growers assembled in Los Angeles on 4 April 1893, resulting in the organisation of the California Fruit Growers' Exchange, through which the growers proceeded to take the marketing of their fruit into their own hands. Similar conditions in the deciduous fresh fruit industry led to the formation in 1900 of the California Fresh Fruit Exchange (afterwards known as the California Fruit Exchange). In 1898 the Raisin Growers' Association had been organised as the result of conditions which had forced the price of raisins below cost of production so that in 1897, in Fresno County alone, 20,000 acres of vineyards were uprooted and farmers fed raisins to their horses.

2. *Unless at the time of organization the conditions in the industry are so unsatisfactory that striking improvements are possible early in the life of the organization, the organization itself is likely to die from inertia or succumb to attacks from outside interests.* — Growers who resort to co-operative methods for the marketing of their products are almost sure to meet with bitter, and often unscrupulous, opposition from those interests which previously handled the product to their own advantage. In the face of such opposition success can only be achieved by unstinted thought and effort devoted to the affairs of the co-operative organization, which can only be expected when previous conditions were such that striking benefits may be expected from the co-operative effort.

3. *There must be a sufficient volume of one product or closely allied products represented by the membership of a local organization to enable shipments to be made in carload lots and to effect a sufficient aggregate saving in the cost of marketing to more than counter-balance the expense of operation.* — The principal volume of California's horticultural products must be placed on distant markets, and carload shipments are essential because of the wide difference in freight rates on carloads and less-than-carloads. To be successful, the loading of a car of perishable fruits must be effected at the point

where shipment originates. It is therefore quite essential that a local association be able to ship its produce in carload lots. The volume of business transacted should also be sufficiently large to permit the economical employment of labour in handling the product and loading the cars, and to prevent the saving from other quarters from being absorbed by overhead expenses. This means that the volume of business must be such as fully to employ the time and energy of the salaried officers. Experience has shown that co-operative marketing cannot be successfully conducted, at least during the shipping season, without one responsible officer devoting his entire time to the business. The President of the California Fruit Exchange has given it as his opinion that in the case of deciduous fresh fruits a local organization has little chance of success if its output is less than thirty carloads during a season, and Mr. Harold G. Powell, Manager of the California Fruit Growers' Exchange, considers that in the case of citrus fruits it is not practical to organize an association and build a packing-house unless there are at least 150 cars of fruit to ship.

4. *The organization must be composed of persons whose interests are similar. Membership in a grower's organization should usually be limited to actual growers of the crop to be marketed.* — Experience shows that this is fundamental. Not only should each growers' co-operative marketing organization handle only one product or a few closely allied products, but each unit of organization should be composed of persons living within a limited area. The quality and finish of a product is more likely to be kept up to a certain standard if the growers live in the same community. The concentration of orange growing in certain regions has been one of the facts which has contributed to the success of the California Fruit Growers' Exchange.

Attempts hitherto made to combine in one organization the interests of growers and commercial packers or dealers have demonstrated the incompatibility of such an arrangement. A case in point which clearly illustrates this, is that of the California Fruit Agency, a sincere yet unsuccessful attempt to combine growers and shippers into one organization for the benefit of the entire citrus industry. In April 1903, when the citrus fruit markets of the country were completely demoralized by the presence of large supplies of oranges showing excessive decay, following a period of wet weather, and the various shippers were each acting alone in their efforts to find markets, Mr. G. W. Felts, member of a commercial shipping firm, thought that the logical way of handling the citrus crop was to have all interests united and tried to bring about such a union. At that time a group of packers was supposed to control 42 per cent of the crop, and the Southern California Fruit Exchange was credited with controlling 47 per cent. Mr. Felts sought to bring together these interests representing practically 90 per cent of the crop. At that time the independent packers were fighting the Exchange for all they were worth. Nevertheless, Mr. Felts was successful in securing a promise from the Exchange that if all the independent packers would join the proposed movement, the Exchange would do likewise. He then succeeded in getting the packers to unite in the Cali-

fornia Citrus Union, and the California Fruit Agency thus consisted of this Union on the one hand, and of the Southern California Fruit Exchange on the other. As stated at the time, "the primary object of the new venture is to eliminate ruinous competition, prevent glutted markets, and provide equal distribution of the output throughout the United States." Mr. Lloyd says: "For a time it looked as though the California Fruit Agency were the solution of all the marketing problems pertaining to citrus fruits. When it started business 1 April 1903, the Agency took over some 1800 cars of fruit en route and on tract unsold, at a time when all markets were congested, demoralized, and in deplorable condition, and the situation altogether disheartening. Within a short time the congested condition of the markets was relieved and the situation entirely changed. Wider distribution of the crop was secured than previously, for agents were shifted to new points without additional expense to the industry, for previously both the Exchange and some independents had maintained representatives in the same market. Thus the former agents of both, maintained now by the new Agency, were able to cover a larger number of markets. . . Shipments during the month of May were 50 % greater than during the same period in any previous season, although the fruit ran to large sizes and did not have good carrying qualities." Yet, in spite of this apparent success, the life of this hybrid Agency was destined to be short one. A provision in the agreement between the Exchange and the packers which prohibited any increase in the membership of the Exchange except under certain regulations, or with the consent of the Agency, was particularly distasteful to the growers. The aim of this provision had been to insure that sufficient fruit would always be left outside the Exchange to provide material for the operation of the independent packers. As a result of the divergent interests represented, and of the consequent jealousies and grievances, on 20 May 1904, at a meeting of the Board of Directors of the California Fruit Agency, it was decided that: "As this organization has not received the general approval and earnest support of the growers necessary to complete and permanent success we deem it advisable to discontinue business on 1 September next."

Similar failure attended like attempts to combine the interests of commercial packers and growers in the Fruit Growers' and Shippers' Association, in the California Raisin Growers' and Packers' Company, and in the Brawley Cantaloupe Growers' Association.

5. *Definite provision must be made for financing the business of the organization.* — With this end in view, various means of securing funds have been employed. In the citrus industry, the local associations have been organized as joint-stock companies in which each member is required to purchase a certain amount of stock for each acre of his orchard. But this has had to be supplemented, to meet initial expenses, by securing a loan from the local bank, so that success or failure has been largely dependent on the attitude of these banks to co-operative enterprise. Extreme difficulty has been encountered in arranging for short time loans needed to defray operating expenses before returns from the sale of products become

available. Experience shows, says Mr. Lloyd, that "if sufficient funds to finance a given organization cannot be secured from subscriptions of growers on the basis of acreage or volume of produce, or borrowed from banks, and the issuing of shares of stock on other than an acreage or volume basis becomes necessary, the sale of such stock should be limited to growers of the product to be marketed, the stock should be transferable only to growers, and the amount of stock which may be owned by an individual firm should be limited."

6. *Benefits accruing from membership in the organization should be distributed among the members in proportion to the value of the products handled for each.* — When stock in a growers' co-operative marketing association has been purchased by members in proportion to their respective acreages or volume of products, it makes little difference whether profits are distributed on the basis of the holding of each member in shares of capital stock or on the basis of the volume or value of products handled for each; still, even then, it is preferable to make such distribution on the basis of the value of the products handled, as this encourages not only the production of higher yields but also of high grade products. When the capital stock is held in amounts disproportionate to acreage it is best to limit the dividend paid on capital stock to a reasonable rate of interest on paid up capital, to set aside a limited amount as a reserve fund, and to divide the remainder in proportion to the value of the products handled for each member. In the case of organizations without capital stock, operated on the non-profit plan, it is usual to estimate expenses as closely as possible, and for the organization to retain a sufficient amount per package or pound to create a revenue to cover all expenses. At the end of the season, any excess over costs which may have been charged to members is returned to them in proportion to the number of packages or pounds handled for each. The charge for marketing should be levied on each package or pound and not according to value of products, as the cost of marketing low grade is as high as that of marketing high grade products. Some organizations, like the Sebastapool Apple Growers' Union, though having capital stock, operate on a non-profit basis but give the growers the direct benefit of the further reduction in the cost of marketing thus afforded.

7. *In a properly constituted growers' co-operative marketing organization it makes little difference whether the voting power is based upon individuals, volume of product, or shares of stock.* — The most desirable form of organization is that in which shares of stock, if any, are held by the growers in proportion to their acreage or volume of product. A vote based on such shares of stock is essentially the same as a vote based on volume of product.

8. *For the purpose of marketing the product of a large horticultural industry, an affiliation of local organizations is preferable to a single large organization made up directly of individual growers. In such an affiliation, the identity of each local should be preserved and its interests fully represented in the central organization.* — While it is desirable that the area covered by local organizations be limited so as to ensure mutual knowledge and confidence between members, marketing is more economical and the distribu-

tion of the product more comprehensive if a general plan is followed by the growers of the same product in several localities. To secure this purpose, experience shows that the members of the various locals should be represented on a central organization, which should meet at fairly frequent intervals. Varying methods have been followed by the several California producers' organizations to secure representation of all the locals on the central without making that body so numerous as to be cumbersome. In the California Fruit Exchange "each growers' organization... not represented on the Board of Directors... shall be entitled to select from its membership some one to sit with this Board at all its sessions, to be known as Associate Director, and enjoy all the privileges of a Director except in voting." Similar methods, though differing in detail, are followed by the Almond Growers and the California Fruit Growers' Exchange. On the other hand, the raisin growing industry has followed the plan of having one large organization made up directly of individual growers, who have no voice whatever in the affairs of the organization except at long intervals. The stockholders elect twenty-five trustees, five each from five districts, who remain in office for a period of seven years, and the stockholders, including the growers, have no further voice in the affairs of the organization till the close of that seven year period. This plan, which has so far worked successfully in the raisin industry, has been followed by the Peach Growers and by the Prune and Apricot Growers.

9. *Each organization must possess a degree of administrative ability and business acumen commensurate with the volume of the business to be transacted and the intricacy of the problems to be solved.* — Experience has shown that, in respect of this important fundamental, co-operative marketing enterprises which develop as the result of initiative on the part of the growers themselves have the advantage over those resulting from the efforts of a professional organizer from the outside, for the former will possess among their membership the organizing ability requisite for success. But these members, being growers, will as a rule, be unable to devote more than a fraction of their time to the affairs of the organization; much will therefore depend on the selection of a manager; and the poorest economy which an organization can make is that of securing a cheap manager. For this position specific training in the handling of a given commodity is found to be of less importance than knowledge of men and of marketing methods and trade conditions in general. Experience as sales' managers in the eastern fruit markets has been found to be exceptionally good training for the manager of a California growers' marketing association, and the California Fruit Growers' Exchange is training in its eastern offices a corps of assistants who are becoming thoroughly familiar with trade conditions in the leading markets and are being advanced to positions as sales managers in the smaller markets as their ability becomes recognized and opportunity offers.

10. *The details of handling, selling and distributing the crop must be adapted to the nature and volume of the products.* — Thus, while for some products, such as beans, almonds, dried raisins, prunes or citrus fruits, the

association can do the packing at considerably less expense than could an individual grower, with other products, such as berries, melons, and those deciduous fresh fruits which are shipped most extensively during hot weather, and which deteriorate rapidly, association packing is impracticable because of the delay it would entail in getting the product from the field to the car. Similarly, local associations handling a relatively small product can have it handled through brokers located in various markets, at less expense than would be entailed in maintaining agents of their own; whereas a large marketing organization, like the California Fruit Growers' Exchange, which, in 1916, handled 30,000 carloads of fruit, can maintain its own sales offices manned by salaried employees working under its own instructions in all the leading markets where its business amounts to 100 carloads of fruit or more per year. Again, in the case of such commodities as walnuts and almonds, for which the wholesale demand is limited to a very short season, the Growers' Associations have wisely elicited the services of brokers. All this shows that the California growers' co-operative marketing organizations have fully recognized the importance of employing methods of sale and distribution adapted to the nature and volume of their respective products.

II. *Loyalty of individual members and mutual confidence among all factors in the organization are absolutely essential to the permanent success of any co-operative enterprise.* — This is the outstanding feature of all success in co-operative effort, and its importance has been fully recognized by co-operative marketing organizations in California. Personal contact between growers and local managers, and between these and the members of the field department have been carefully cultivated. Efforts are made to induce growers to attend the annual stockholders' meetings. The California Fruit Growers' Exchange keeps its 8,000 members in personal touch with the activities of the organization as a whole, and makes its representatives in the eastern markets realize their function as parts of one great organization working to achieve the best possible distribution of the California citrus fruit crop, and to this is attributed its present efficiency in the marketing of this product.

§ 2. ADVANTAGES OF CO-OPERATIVE MARKETING.

Now that we have examined the fundamental principles of co-operative marketing let us glance at its advantages. Mr. Lloyd classifies them under five heads:

(1) reduction of the cost of marketing; (2) improvement in the distribution of the product; (3) increased demand for the product; (4) standardization; (5) protection of the individual grower.

The cost of marketing includes packing-house charges, transportation and brokerage, commission or other form of compensation for doing the selling. The reduction in the cost of packing realized by the orange growers through co-operative action is striking. A circular issued by the Califor-

nia Fruit Growers' Exchange in 1911 states: "A brief review or comparison of conditions as they existed just prior to the formation of the Exchange and as they exist to-day is interesting. Then, the cost of packing a box of oranges and putting it upon the car was between 40 and 50 cents. Now the same service, better done, costs on the average 30 cents." This is the result of the elimination of profits formerly accruing under a system of commercial packing, and the purchase of box material and other packing-house supplies in enormous quantities for the entire Exchange system, and their distribution to the various associations at actual cost.

Great economies were also effected in the cost of selling when the orange growers took the business into their own hands. The usual commission charge was 10 per cent., which fell, under co-operative management, to about 4 per cent, effecting in 1895 a saving of a full 150,000 dollars for the growers, and the annual reports of the present General Manager, G. Harold Powell, show that the cost of selling citrus fruits through the California Fruit Growers Exchange from 1912 to 1916, has been less than 3 per cent on the gross sales, inclusive of outlay for maintaining a comprehensive advertising campaign each season.

The California Fruit Growers' Exchange also took the lead in securing reductions in freight rates and refrigeration charges on California citrus fruits. The orange freight rate was reduced 7 cents per box, and the lemon freight rate 21 cents per box, equivalent, on the basis of the 1911 output, to an annual saving of over 1,700,000 dollars. These savings have benefited the entire industry and not only the members of the Exchange.

The traffic department of the California Fruit Growers' Exchange, by a thorough system of auditing, has greatly reduced losses due to freight overcharges or damages in transit. In 1916 the Exchange secured for its members from the railways the payment of claims for pilferage, overcharge, loss, or damage in transit amounting to 111,557.31 dollars which it returned to the shippers. The system of conducting business on a cash basis through personal representatives in all the leading markets has reduced loss from bad debts to a minimum. In 1916 the growers belonging to the Exchange lost only 102.73 dollars from such causes.

Before the formation of growers' co-operative marketing organizations California found it difficult to dispose of her fruit crops to advantage when the total annual shipment of oranges, for example, was only about 4,000 cars. The returns to growers were so low that the cry of overproduction was set up, and in some cases large areas of fruit plantations were uprooted because they were netting the growers less than the cost of production. This was especially true of the raisin and almond growers. But the trouble was due not to over production but to defective marketing. Business was confined by the shipping firms to a few large cities and no attempt made to develop smaller markets. Under co-operative methods the shipping season has been extended and the customs of consumers are being changed by the efforts of the marketing organizations. Lemons and oranges are now shipped from California the whole year round, as the result of a carefully thought out advertising campaign which has educated the public up to the

winter uses of lemons and the summer uses of oranges. Markets formerly dependent on reshipments from Eastern cities, are now supplied direct by the California growers, and the smaller cities are centres from which the fruit is distributed to the surrounding villages. Persistent efforts on the part of the co-operative organizations have induced the railroads to improve their transportation and refrigeration service, and a stage has now been reached in which the railroad companies recognize that they and the fruit growers have mutual and not antagonistic interests.

While the population of the United States increased 20.7 per cent. from 1890 to 1900, the shipments of citrus fruit increased 195 per cent. during the same period. From 1900 to 1910 the population increased 21 per cent and citrus fruit shipments 292 per cent. Foreign markets, particularly Canadian markets, have been developed to help take care of this increased production ; but above all the prosperity of the citrus fruit industry is due to the educational advertizing campaign carried on systematically by the California Fruit Growers' Exchange, which has resulted in largely increasing the fruit-eating habit among the people, thus increasing the per capita consumption of fruits.

Besides direct advertizing, the Exchange has a large Dealer Service Department, which is constantly studying retail and wholesale conditions affecting the sale of citrus fruit, and applying facts thus developed in connecting the advertizing directly with the fruit trade. Merchants are shown how to make attractive fruit displays, how to sell a larger volume of oranges and lemons, how to do a more profitable business on a lower margin, how to keep fruit fresh, minimize waste, and take advantage of the national advertizing. This service involved in 1916 more than fifteen thousand personal calls on retail fruit merchants.

The example set by the California Fruit Growers' Exchange in advertizing has been followed by the California Associated Raisin Company, which spent 117,452 dollars on advertizing in 1914, equivalent to \$1.64 per ton of raisins sold. This was looked upon as a very good investment as it increased the sales of seeded raisins to bakers from 750 tons in 1914 to 7,300 tons in 1915. The California Walnut Growers and the California Almond Growers' Association have also resorted extensively to advertizing.

Successful advertizing depends on the standardization of the product and this, in the case of fruits, can only be secured by concerted effort on the part of those who supervise the preparation of the product for market. In California, this standardization of products has preceded rather than followed legislative enactments made with this end in view, and a much more rigid standard can be maintained by co-operative organizations of growers than could be enforced by government officials.

The citrus fruit growers have adopted a box of a definite size and shape for packing oranges and another for lemons, and all members of the organization are required to use these in packing their fruit. Grades have been established, and members of the Field Department visit the Exchange packing-houses every few days to promote as great uniformity as possible in grading and packing throughout the 162 local associations.

Similar action has been taken by the California Almond Growers' Exchange, by the California Associated Raisin Company, by the Sebastopol Apple Growers' Union, and, as far as the nature of the product, cantaloupes, permits, by the Turlock Merchants and Growers.

So long as the individual growers sold their crops directly to speculative buyers, or had them handled by shipping firms on a so-called commission basis, they were open to exploitation on the part of the buyer or shipper, and if they consigned their fruit to a distant market they had to accept whatever the distant dealer saw fit to send. All this has been changed in California by co-operative effort. At relatively slight expense per member or per unit of fruit handled, a large organization can secure a thorough knowledge of the markets and maintain during the marketing season a thoroughly organized telegraphic service that will enable it to know the exact condition of each market every day. Thus distribution can be rationally organized and the salaried agents of the co-operative organization on the several markets know that their compensation does not depend upon the number of cars sold in a given market but upon their ability to assist intelligently in that distribution of the product which will yield to the growers the highest average returns. Moreover, all the fruit of the same grade contributed by the different growers in a given local association during the same period is pooled, and each grower receives for his fruit the average net returns for the period; thus loss resulting from deterioration in transit is reduced to a minimum for the individual concerned.

§ 3. RELATIONS OF GROWERS' CO-OPERATIVE MARKETING ORGANIZATIONS TO CONTROL OF PRODUCTION, DISTRIBUTION, AND PRICES.

After this survey of the fundamental principles of co-operative marketing and of its advantages, Mr. Lloyd briefly enquires into the relation of such organizations as he has described to the control of production, distribution and prices. None of the growers' co-operative organizations in California have provisions for limiting acreage or for exercising control over the amount of land to be planted to a given crop. Their success in marketing their members' produce has led to an increase of acreage, and the policy of the co-operative marketing organization has been to welcome this increase. Their function is to promote rather than to restrict production, and to make increased production profitable by increased efficiency in marketing. The plan adopted by the marketing organization hitherto is to accept all acreage offered, to secure as careful an estimate as possible of the probable yield, and to plan the marketing campaign accordingly.

While marketing is facilitated by co-operation, a grower who joins a marketing organization does not and should not relinquish his right as an individual to determine the acreage he will plant and the special efforts he will exert to secure as large a yield as possible.

Who should determine the methods to be employed in disposing of the crop? The final authority in this matter rests with the individual

growers ; the central body, in case of large marketing organizations, may suggest radical steps to be taken, but no power except a majority vote of the membership of a given local should bind that local to adopt new or unusual methods in the disposal of its crop. The central body should have the power to advise, not to dictate, changes of policy to meet new conditions from time to time.

What special method of disposal of the product may be resorted to in case of sudden increase of production ? When, in spite of all efforts to extend the market it is found impossible to maintain the due relation between supply and demand, the growers' organization — unless it is to be considered as actuated primarily by philanthropic motives — has only one logical course to pursue and that is to grade the fruit more rigidly than ordinarily and to ship to distant markets only such grades as have a reasonable prospect of selling at a price sufficiently high to return to the grower some net proceeds.

What should be done with the lower grades of fruit ? In the first place, all local markets should be kept supplied to their full capacity at low prices ; secondly, shipments of fruit should be made in boxes, without packing, to markets near enough to be reached with out refrigeration ; thirdly, the growers should find an outlet for their fruit other than in the fresh state, such as canneries. The above remarks apply principally to products of a perishable nature. In the case of relatively non-perishable products such as raisins and dried peaches, there should be no reason for allowing any of the product to go to waste.

Fruits are looked upon mainly as luxuries rather than as staples. Therefore relatively small changes in price are likely to be accompanied by comparatively large changes in amounts taken. It would therefore be impossible for a growers' co-operative marketing organization, even if it controlled the entire supply of a given fruit product, to sell its output at an arbitrary price, fixed without reference to the available supply as compared to the demand in the markets. Organization has enabled the growers to shift their market one step nearer to the consumer, and to obtain some voice in deciding the price at which they will sell their product ; but the very nature of these products makes it impossible for them to exact prices unwarranted by the relation of the supply to the demand. Co-operative marketing organizations of growers are not regarded as combinations in restraint of trade ; they promote rather than restrict trade ; and their influence has been on the side of reducing rather than increasing the cost to the ultimate consumer.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

ARMENIA.

THE CO-OPERATIVE MOVEMENT. — Ter-Mikrtichjan (G.): Co-operation in Armenia. In : *The Russian Co-operator*, Vol. 4, No. 4. London, April 1920.

The co-operative movement in Armenia is of a comparatively recent origin. The first co-operative distributive society was opened in the Nakhichevan district in 1900. A few years later a number of credit loan and savings associations were founded in various Armenian provinces, but the movement made no headway owing to the old Russian laws on co-operation and the obstacles set up by the local authorities. A more favourable situation developed only after the revolution in Russia (1905) and Turkey (1908).

The general economic and food crisis in the country, the new law on co-operation promulgated by the Provisional Government in 1917, and a number of causes of local origin gave the movement a fresh impetus. By the end of 1917 there were in the Armenian provinces of Transcaucasia over 400 co-operative societies, of which 90 per cent. were distributive, and 10 per cent. credit societies. The number of families served by the co-operative societies equalled 50,000, embracing altogether about 250,000 persons. Thus one-fifth of the population satisfied their needs through co-operation.

In the spring of 1918 the Turkish invasion wiped off about nine-tenths of the societies then in existence, and only about 30 societies together with the Erivan Provincial Union escaped the common fate. With the withdrawal of the Turkish troops in the autumn of 1918, the number of societies rose in the beginning of 1919 from 30 to 200. These 200 societies contained 60,000 members (each representing a family) and had an aggregate capital of 2 million roubles, a reserve capital of 500,000 roubles, and a trade-turn-over for eight months to the amount of 75 million roubles. The majority of these societies are now united in three district Unions.

In July of last year a congress of representatives of Armenian Co-operative Societies brought to fulfilment the idea of creating a Central Co-operative Union, "*Aicoop*" (the last name meaning "Armenian Co-operation"). All the consumers' Societies, credit associations, and district unions of the country are united in the "*Aicoop*," which acts as the only co-operative centre of Armenia, and has the exclusive right of entering into relations with co-operative organisations in other countries. The "*Aicoop*" has five departments, including, amongst others, the Non-Commercial Department with the sub-departments, instructors, statistical, social and educational, publishing, and legal, and the Trading Department with the sub-departments dealing with home and foreign trade, finance, production, and distribution.

In Armenia agriculture is the staple industry of 90 per cent. of the population. Thus, the principal task of co-operation is naturally that of developing agriculture.

Owing to the general break-up of the economic life of the country and the extreme instability of the rate of exchange, the financial crisis has become extremely acute. With its half-a-million roubles of share and reserve capital and about 12,000,000 roubles of working capital, the "Aicoop" is only partly able to satisfy the needs of co-operation. To re-build the hundreds of ruined societies, provide the population, the Government, and the public and refugee organisations with the necessary products and goods, and to supply the peasantry with agricultural machinery and implements the "Aicoop" requires large funds, but these have been difficult to procure, and the result has been a slower development of the movement in the country than would have otherwise been the case.

FRENCH PROTECTORATE OF MOROCCO.

AN AGRICULTURAL FEDERATION IN MOROCCO. — *Revue Agricole de l'Afrique du Nord*. Algiers, 5 March 1920.

The first agricultural association of Morocco was founded during the war at Dar-bel-Amri, and later similar associations were established at Mechra-bel-Ksiri, Kénitra, Babat, Bon-Zenika, Meknès, Mazagan, and Marrakech.

In January 1919 these different associations combined their efforts and their means of working by forming the Union of Agricultural Associations of Morocco, which now includes more than three hundred members.

The Union has established a weekly paper for the protection of agriculture, and presided over the formation of mutual credit banks, which during their first year of existence and for the single region of Rabat granted loans for many hundreds of thousands of francs. It is also occupied in the creation of co-operative societies and in the study of economic and agricultural reforms, calculated to give a great impulse to the country. It has created a current of ideas favourable to the development of colonisation on a small or medium scale, which has incited the government to seek out land for cultivation, to divide it into lots and distribute them to French colonists on advantageous terms.

In this way the centre of Petitjean, situated at the junction of the projected railways Tanger-Fez and Casablanca-Rabat-Kénitra-Meknès-Fez-Taza has been able to develop. In this locality from 400 to 500 hectares of excellent land have been sold to French agriculturists in lots varying in size according to whether they are intended for the cultivation of cereals, or to serve as market gardens and for the cultivation of industrial plants. The price, payable in ten annual instalments, varied from 250 to 300 francs per hectare.

GREAT BRITAIN AND IRELAND.

OFFICIAL STATISTICS OF AGRICULTURAL CO-OPERATION IN 1917. — Reports of the Chief Registrar of Friendly Societies for the Year ending 31st December 1917. Part B, Industrial and Provident Societies. London, 1920.

We extract from the Report for 1917 on Industrial and Provident Societies a series of tables giving statistics of agricultural co-operative

TABLE II. — *Societies carrying on other Businesses connected with Agriculture.*

	Statistics for 1917					Totals	
	Flax societies	Horse and cattle breeding societies	threshing societies	Agricultural development societies	societies carrying on miscellaneous businesses	1917	1916
Number of societies furnishing returns	12	18	18	20	13	86	74
Number of members	936	1,299	503	4,068	5,695	12,501	11,436
	£	£	£	£	£	£	£
Income from business.	10,398	4,395	3,263	7,111	31,680	56,847	40,601
Salaries and wages	4,539	348	1,201	8,800	7,733	22,621	17,347
Other management expenses	2,728	1,943	1,578	12,418	7,876	26,343	21,683
Surplus on year's working	1,639	360	450	10	11,107	13,566	14,574
Interest on shares	—	15	55	—	875	945	996
Liabilities:							
To shareholders.	3,730	4,292	2,544	11,853	27,064	49,483	40,242
To creditors for loans.	3,942	119	5,023	8,163	18,165	35,412	39,493
Other liabilities.	1,055	657	375	1,163	168,150	171,400	94,896
Net balance of profit and reserve (or loss).	3,342	637	2,078	(- 324)	19,368	25,101	18,057
Assets:							
Buildings, fixtures, and land used in trade	8,252	—	7,704	15,066	13,429	44,451	49,187
Investments.	14	201	1	683	23,558	24,457	18,320
Other assets.	3,803	5,504	2,315	5,106	195,760	212,488	125,181

TABLE III. — *Credit Societies registered under the Industrial and Provident Societies Act.*

	1917	1916
Number of societies furnishing returns	3	3
Number of members	60	55
	£	£
Loans to members repaid	462	718
Receipts on deposit accounts.	39	2
Receipts on current accounts	—	—
Interest and premiums on loans received	185	143
Loans to members	629	—
Salaries and wages	235	250
Other management expenses	186	105
Surplus on year's working.	25	(- 282)
Interest on shares.	1	—
Liabilities:		
To shareholders	663	630
On deposit accounts.	555	525
On current accounts	—	—
To creditors for loans	2,336	2,155
Other liabilities	1	3
Net balance of profit and reserve (or loss)	(- 696)	(- 716)
Assets:		
Loans owing to society	2,431	2,265
Buildings, fixtures, and land used in trade	1	2
Investments	239	1
Other assets	188	329

TABLE IV. — *Credit Societies registered under the Friendly Societies Act.*

	1917	1916
Number of societies furnishing returns	201 (	210
Number of members.	18,746	18,670
	£	£
Deposits	12,506	11,509
Loans made:		
Number	6,003	6,203
Amount.	50,554	49,996
Liabilities:		
Deposits.	52,230	45,801
Other creditors.	16,505	17,485
Other liabilities	5c.	598
Balance of profits and reserve	6,291	6,028
Assets:		
Loans.	57,395	55,077
Other assets	18,218	14,835

(1) 161 Societies with 17,921 members are Irish Societies.

TABLE V — *Small Holdings and Allotments Societies.*

	1917	1916
Number of societies furnishing returns	254	181
Number of members	38,275	19,130
•	£	£
Sales	24,046	10,293
Rent paid by society for land.	32,044	30,249
Rent received from tenants	39,249	35,170
Trading departments, surplus on year's working.	1,029	318
Liabilities: To shareholders	17,120	12,883
To creditors for loans.	28,959	25,010
Other liabilities	14,560	12,992
Net balance of profit and reserve on trading department. . . (or loss)	2,778	698
Net balance on small holdings department	6,724	6,046
Assets: Value of stock-in-trade.	2,371	1,438
Buildings, fixtures, and land used in trade	39,337	34,299
Investments and other assets.	28,442	21,892
	Acres	Acres
Acreage of land: Small holdings.	13,290	13,258
Grazing rights.	731	699
Allotments	2,778	1,780
Number of tenants: Small holdings	1,382	1,430
Allotments	23,391	12,627
Size of holdings:		
1-5 acres { Number	759	783
{ Acres	1,931	1,903
5-10 acres { Number	271	293
{ Acres	1,909	2,074
10-30 acres { Number	247	249
{ Acres	4,319	4,294
30-50 acres { Number	66	69
{ Acres	2,460	2,780
Over 50 acres { Number	40	33
{ Acres	2,525	2,163

TABLE VI. — *Allotments Societies, Agricultural and Horticultural Clubs and Development Societies registered under the Friendly Societies Act.*

	1917	1916	1915	1914
Number of societies furnishing returns (1)	20	19	18	18
Number of members	3,737	3,167	2,773	2,742
	£	£	£	£
Funds.	3,889	3,505	4,813	3,673

(1) 16 are allotment societies, 2 clubs, and 2 development societies.

societies in the United Kingdom for 1917. To indicate the progress of the movement we give also some figures for 1916. More detailed statistics for 1916 and total figures for the four previous years were published in our issue of January-February 1919. In Table VI we give also figures for 1915 and 1914 for allotments societies and agricultural and horticultural clubs and development societies registered under the Friendly Societies' Act, as statistics of these societies were not given in previous Reports.

The "societies carrying on miscellaneous businesses" of which statistics are given in Table II include agricultural insurance societies, but it is not possible to separate them from the group.

SWITZERLAND.

I. — CANTONAL, INTERCANTONAL, AND NATIONAL DAIRY SOCIETIES AND FEDERATIONS. — *Schweizer Käse- u. Molkerei-Kalender. Milchwirtschaftliches Taschenbuch* 1920. Published by Dr. Koestler. Berne. Wyss Erben, 1920

We have already had occasion to speak of the cantonal, intercantonal, and national dairy federations and societies in Switzerland, in an article published in our issues of March and April 1913, in which we gave a résumé of an inquiry into the condition of association in Swiss agriculture on 1 January 1910, made by the Swiss Peasants' Secretariat (1). Since that time the condition of these societies and federations has naturally undergone important modifications, as may be seen from the *Schweizerischer Käse- und Molkerei-Kalender* for the year 1920 the data in which refer to the year 1918. Of this *Kalender* we avail ourselves to bring up to date that part of the inquiry into the state of association in Swiss agriculture which related to dairy organisation.

The cantonal, intercantonal and national dairy societies are divided into two groups, according to the nature of the interests they represent: A. *Associations of Manufacturers and Dealers*; B. *Federations of Milk Producers*.

A. Associations of Manufacturers and Dealers.

On 31 December 1909, there were three such associations and in 1918 there were twelve, an increase of nine.

(1) *Swiss Dairy Society*. — Founded at Olten in 1887 it unites the dairy societies and federations, and proposes to improve the production and technique as well as the sale of the produce. On 7 July 1901 it was amalgamated with the *Central Swiss Dairy Federation*. On the 31 Decem-

(1) Berne, Wyss, 1912.

ber 1909 it comprised 12 sections with 1,113 members ; in 1918 there were 10 sections with 3,255 members.

(2) *Dairy Society of Latin Switzerland*. — Founded at Lausanne 28 February 1887 as section of the *Federation of the Agricultural Societies of Latin Switzerland*.

(3) *Federation of Swiss Cheese Exporters*. — Constituted 6 October 1896.

(4) *Co-operative Society of Swiss Firms engaged in the Exportation of Cheese*. — Formed in September 1917 in consequence of the war, on the special initiative of the Swiss Peasants' Secretariat and with the support of the Swiss Department of Public Economy and that of the Federal Office of the Food Supply and the Federations interested in dairy produce. This co-operative was described in the articles on "The Food-Supply Crisis in Switzerland and State Action to overcome it, 1914-1919" published in our issues of March and April 1920.

(5) *Swiss Dairy Federation*. — Founded in 1907. It numbers 350 members.

(6) *Free Association of Swiss Cheese Merchants*. — Constituted in April 1915 exclusively among cheese merchants who do not belong to the *Co-operative Society of Swiss Firms engaged in the Exportation of Cheese* but are occupied in the home cheese trade.

(7) *Free Association of Producers and Merchants of Appenzell Cheese*. — Founded 19 November 1916, to protect the interest of cheese producers and of the cheese trade in the canton of Appenzell.

(8) *Federation of Swiss Producers of Soft Cheeses*. — Founded 29 January 1917 with the object of extending the soft cheese industry in Switzerland.

(9) *Swiss Butter Union*. — Constituted 2 May 1917 by the fusion of the *Co-operative Society* and the *Federation of Swiss Butter Merchants*, both of which arose during the war to protect the interests of the Swiss butter trade.

(10) *Federation of Cheese Producers of the Canton of Vaud*. — Founded 28 September 1916, it numbers 100 members.

(11) *Dairy Society of the Canton of Fribourg*. — Constituted 18 April 1916, it numbers about 60 members.

(12) *Gruyère Cheese*, limited liability company, at Bulle. Founded 16 May 1916. It comprises five other dairy and cheese-making societies and federations of the district.

B. *Federations of Milk Producers.*

The object of these organisations is to protect the interests of producers and especially to ensure to them a remunerative price for their milk.

On 1 August 1918 the federations in question were 24 in number, and all belonged to the *Central Federation of Swiss Milk Producers*. Since 1910 their number had increased by ten. In the course of the last few years there

were radical modifications and alterations even among the Federations that were existing on the 1 January 1910.

1. *Federation of Co-operative Dairy Societies and Co-operative Cheese-making Societies of the Canton of Berne*, with head-quarters at Berne, formed on 24 October 1911, by the union of the *Federation of Cheese-makers of the Canton of Berne* (founded in 1896) and of the *Federation of Co-operative Dairy Societies of Central Switzerland* (founded in 1905). In 1918 there were 726 affiliated co-operative societies with about 19,631 members.

2. *Thurgau Federation of Cheese-making Societies* with headquarters at Weinfelden, founded in 1893. It numbers at the present time 211 affiliated co-operative societies with 6,030 members.

3. *Federation of Co-operative Dairy Societies and Co-operative Cheese-making Societies of North East Switzerland* with head-quarters at Winterthur. Founded in 1904 it numbers at present 568 affiliated societies and 278 individual members, making a total of 14,628 members.

4. *Federation of Co-operative Cheese-making Societies of the Canton of St. Gall* with headquarters at St. Gall. Founded in 1907, it numbers 130 affiliated societies, 22 individual members, and a total of 3,066 members.

5. *Aargau Federation of Co-operative Dairy Societies and Co-operative Cheese-making societies*, with headquarters at Brugg. Founded in 1908, it numbers 160 affiliated societies and 4,560 members owning 18,970 cows.

6. *United Geneva Dairies* with head-quarters at Geneva. It numbers 53 affiliated societies, with 930 members owning 2,776 cows.

7. *Federation of Dairies of Vaud and Friburg* with head-quarters at Donneloye. Founded in 1907; it numbers 275 affiliated societies, with 7,436 members owning 35,271 cows.

8. *Federation of Co-operative Societies for the Utilization of Milk of Central Switzerland*, with head-quarters at Lucerne. Founded in 1907, it numbers 301 affiliated societies with 7,248 members owning 72,342 cows.

9. *Federation of the Milk Producers of the Cantons of St. Gall and Appenzell* with headquarters at Rheineck. Founded in 1907; 25 affiliated Societies; 1,654 members; 12,278 cows.

10. *Federation of Co-operative Dairy Societies of the Cantons of Zug, Aargau and Lucerne*. Head-quarters at Zug; founded in 1906; 23 affiliated societies, with 645 members owning 6,451 cows.

11. *Federation of Co-operative Dairy Societies and Co-operative Cheese-making societies of North-West Switzerland*. Head quarters at Basle; founded in 1905; 234 affiliated societies; 8,365 members; 31,814 cows.

12. *Federation of Milk Producers of Rorschach and its neighbourhood*. Headquarters at Goldach; founded in 1907; 4 affiliated societies; 280 members; 2,000 cows.

13. *Federation of the Co-operative Societies of the Cantons of Vaud and Geneva*. 48 affiliated Societies; 1,226 members; 5,513 cows.

14. *Federation of Co-operative Dairy Societies of Friburg, Zone of the Bulle Mountain*. 121 affiliated societies; 3,556 members; 24,738 cows.

15. *Federation of the Milk Producers of Rheintal-Appenzell*. 25 affiliated societies; 1,788 members; 6,134 cows.

16. *Federation of the Dairies of the Jura, Apples*. 115 affiliated societies; 3,250 members; 21,500 cows.

17. *Agricultural Dairy, Lausanne*. An association of milk producers founded in 1895; 40 affiliated societies; 980 members; 3,640 cows.

18. *Syndicate of Milk Producers of Lausanne and its neighbourhood*. 39 affiliated societies; 574 members; 2,366 cows.

19. *Federation of the Dairies of the District of Leman*. 63 affiliated societies; 1,155 members; 4,654 cows.

20. *Federation of the Dairies of the Canton of Neuchâtel*. Headquarters at Cernier; 68 affiliated societies; 1,876 members; 11,227 cows.

21. *Federation of the Milk Producers of Nidwalden*. Headquarters at Oberdorf; 8 affiliated societies; 448 members; 3,080 cows.

22. *Federation of Milk Producers of Obwalden*. Headquarters at Sarnen; 5 affiliated societies; 493 members; 3,321 cows.

23. *Federation of the Milk Producers of the Canton of Appenzell I.-Rh.* Headquarters at Steinegg-Appenzell; 1 affiliated society; 88 members; 380 cows.

24. *Association of the Milk Producers of the Canton of Ticino*. Headquarters at Bellinzona; 8 affiliated societies; 600 members; 2,000 cows.

For 1918 we have therefore a total of 3,240 co-operative societies with 89,641 members owning 520,200 cows, which belong to the *Central Swiss Federation of Milk Producers*, and are subdivided into the 24 regional Federations above enumerated.

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2 THE UNION OF THE AGRICULTURAL SYNDICATES OF LATIN SWITZERLAND (USAR) in 1918-19. — *Journal d'Agriculture Suisse*, Year 47, No 15, 13 April 1920.

The "Union of the Agricultural Syndicates of Latin Switzerland" (*Usar*) has published the report of its third working year, which comprises the period from 1 July 1918 to 30 June 1919.

	Members
The societies composing this Union are the following ;	—
The Agriculturists' Club of the Canton of Geneva	1,838
The Society of Agriculture and Vine-growing of the Canton of Vaud	10,260
The Federation of Agricultural Syndicates of the Canton of Friburg	10,120
The Agricultural Association of the Canton of Valais	4,353
The Cantonal Society of Agriculture and Vine-growing of Neuchâtel	3,047
The Swiss Union of Agricultural Mills	7,380
The Swiss Association of Experts	128
The Agricultural Society of Ajoie	302

Total number of members . . . 37,428

The *Usar* is managed by a committee of 19 members, and is occupied in the purchase, distribution and sale of chemical manures, concentrated feeding-stuffs, cereals etc., in the name and on account of the federated societies.

In the year's work in question its turn-over amounted to Fr. 5,700,000, with a net profit of Fr. 52,483 (0.92 per cent of the business transactions). It sold 1,755 waggon loads of goods (cereals, feeding stuffs, manures) for a total of Fr. 5,694,862.

Part II: Insurance and Thrift

BELGIUM.

THE "CAISSE GÉNÉRALE D'ÉPARGNE ET DE RETRAITE" DURING THE WAR

SOURCES

LA CAISSE GÉNÉRALE D'ÉPARGNE ET DE RETRAITE ET SES DIFFÉRENTS SERVICES BRUSSELS, 1910

LA CAISSE GÉNÉRALE D'ÉPARGNE ET DE RETRAITE PENDANT LA GUERRE · 1914-1918, BRUSSELS, 1919,

The *Caisse Générale d'Épargne et de Retraite*, established under the provisions of the Law of 16 March 1865, and placed under government supervision, acts both as a financial organ for the investment of the funds which it collects, and as a friendly society, mainly on behalf of the working classes. Under the terms of the Act the *Caisse* should only attend to collecting savings and providing pensions: but the requirements of recent social legislation led to its being gradually entrusted with several other duties, among them that of providing agricultural credit, loans for the construction or purchase of homes for the working classes, pensions due under the workmen's compensation law, etc., and thus, in the course of time, its activities have grown ever more complex and important.

Ever since its foundation the *Caisse* has steadily grown richer, beyond the expectations of the legislators of 1865. It was then estimated that it would, at most, administer a capital of 100 million francs, but this sum was already exceeded in 1875. On the eve of the war, 31 July 1914, the *Caisse d'Épargne* had collected, from a population of some seven and a half millions, the sum of 1,129,000,000 frs., entered on 3,151,000 savings account books, and 580 million francs entered on 138,000 pensions' account books in connection with the savings accounts. On the other hand, the pension fund had 1,635,000 subscribers, and the total amount paid up was 238 million francs. The total value of the capital administered by the several branches of the *Caisse* amounted to nearly 2,000,000,000 frs. The war, of course, reacted violently on

the work of this institution which, nevertheless, succeeded in overcoming the crisis successfully, as can be seen from a recent report published by the Director General, from which we draw the more important data.

§ I. THE WORK OF THE "CAISSE."

The "Caisse d'Épargne." — On the outbreak of the world war, deposits fell off considerably and withdrawals increased, as a result of the panic among depositors, who feared that the Bank would not be able to meet its liabilities. Table I shows the respective importance of receipts and disbursements on individual savings accounts from 1913 to 1918. In 1913 the former exceeded the latter by nearly 9.5 million francs. Beginning with 1914 the disbursements greatly exceed receipts. The difference is over 57 million francs in 1915, over 68 million in 1915, but, although the crisis continued, confidence was gradually restored, and the difference fell to 43 millions in 1916 and to 11 millions in 1917. In 1918 the receipts exceeded disbursements by nearly 72 million francs.

TABLE I. — *Savings Account Business from 1913 to 1918.*

	1913	1914	1915	1916	1917	1918
Receipts in francs. . . .	328,640,000	208,658,000	20,777,000	38,083,000	69,193,000	149,469,000
Payments in francs. . . .	319,088,000	265,832,000	89,619,000	81,547,000	80,550,000	77,532,000
Excess of receipts over payments or viceversa. +	9,552,000	-57,174,000	-68,842,000	-43,464,000	-11,357,000	+71,937,000
No. of Savings Accounts on 31 December. . . .	3,109,151	3,114,310	3,105,564	3,107,749	3,115,834	3,145,701
Amount entered on Savings Accounts on 31 December.	1,084,641,000	1,053,981,000	1,037,395,000	1,038,769,000	1,072,122,000	1,188,768,000

This table shows that in spite of the large number of payments made, the number of savings accounts has varied little during the period under consideration. The sums held on this account, after undergoing a considerable reduction during the war years, rose considerably in 1918.

The "Caisse de Retraite." — Founded by the Act of 8 May 1850, and merged with the Savings Bank by the Act of 16 May 1865, the main duty of this *Caisse* is to provide pensions, more especially for the working classes. The immediate or deferred annuities provided for reach a maximum amount of 1,200 francs per annum. The former cannot be for less than 12 francs, and the lowest age for recipients is 10. The latter are secured by premiums which vary according to whether the capital is reserved or not, and the annuities may be made payable at any age between 50 and 65 years. Any person who has attained 18 years of age may make payments, either on his own account or for another, whose

age must not be under 6. When the capital is reserved the *Caisse* undertakes to return to the heirs on the death of the annuitant 97% of the amount paid. This sum may be used, in all or in part, on the death of the person who has taken out the insurance, and within limits fixed by law, for providing other pensions or for increasing the pension previously paid. The propaganda carried on by this *Caisse*, the subsidies granted by the Government to those friendly societies which insured their members with it, and contributions received from the employé class, greatly increased the resources of this provident institution. All this, during the war, inevitably suffered a set back. The following figures show the payments made from 1913 to 1917, inclusive of the award and grants made by government institutions :

TABLE II. — *Payments made to the Pension Fund.*

1915		1914		1915		1916		1917	
Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2,676,945	22,795,499	1,590,245	14,108,825	1,340,352	10,109,305	1,272,779	10,719,763	1,176,604	10,767,141

From 1914 to 1917 the new names entered number 145,964.

The *Fonds des rentes* whence the *Caisse* draws the money wherewith to meet its liabilities, amounted on 1 January 1914 to a round sum of 234 million francs, and at the end of 1917 to 301 million francs. From 1914 to 1917 members' accounts were credited with a sum of 17,186,262 francs, being the first awards paid by government institutions as an encouragement, the State contributing to said sum the amount of 16,755,381 francs and the provinces and communes 430,881 francs. The capital payments made by the *Caisse* amounted to 859,000 francs in 1913 and fell to 466,000 in 1914. They rose to 602,517 francs in 1915, to 782,807 in 1916 and 763,550 in 1917. In conclusion, it may be said that while the years of the German occupation marked a decline in business connected with pensions, nevertheless the general activity carried on in behalf of this provident institution was not substantially modified in its several branches, which the *Caisse* constantly fostered and promoted.

The "*Caisse d'Assurance*." — This Life Insurance Fund was organized under the provisions of art. 8 of the Act of 9 August 1988, on workmen's dwellings. That article authorised the *Caisse Générale d'Épargne et de Retraite* to issue mixed life insurance policies so as to ensure at a fixed date, or on the death of the policy-holder, should it occur before that date, the repayment of loans made for the purpose of building or purchasing a house. The number of policies taken out during the war was as follows : from 1 August to 31 December 1914, 57 ; in 1915

435; in 1916, 626; in 1917, 621; in 1918, 611; in all, 2,350. The periodical premium-receipts, from 1 August 1914 to 30 June 1918, amounted to 1,589,400 francs and premiums paid in a lump sum amounted to 154,773 frs. The total amounts paid out in this account were 3,581,275 francs.

The "Caisse de Rentes-Accidents." — This fund for accident insurance pensions, organised by the *Caisse Générale* provides for pensions in the cases foreseen by the Act of 24 December 1903, either in case of death or permanent disablement caused by accident. On 31 July 1914, 3,150 pensions were paid, and the pension-fund amounted to 8 million francs. During the war, the *Caisse* only made 72 payments, 42 for accidents causing death, and 30 for permanent disablement. The total receipts for the pension fund amounted to 356,000 francs.

We will now deal with the work done by the *Caisse Générale d'Épargne et de Retraite* in the field of workmen's dwellings and agricultural credit.

§ 2. WORKMEN'S DWELLINGS.

It should be stated that the Act of 9 of August 1889, amended by the Act of 30 July 1892, established in Belgium special committees (*comités de patronage*) to promote the building and renting of workmen's dwellings to be sold to workmen either for cash or by annual instalments. This same law authorised the *Caisse* to invest part of its available funds in loans for building or purchasing workmen's dwellings, to be granted on the advice of the aforesaid committees. The *Caisse* was also authorized, as above stated, to issue mixed life insurance policies so as to guarantee the repayment of said loans. A decree of 25 March 1891 fixed the rate of interest and general conditions of the loans granted to individuals, associations, provinces, communes, and government bodies. Encouraged by the *Caisse* many associations for workmen's dwellings were formed to act as intermediaries between the workmen and the Bank. The latter makes loans at 2 ½ % to those credit associations which place themselves under its supervision, and are organized as limited liability or co-operative companies to facilitate, by the grant of loans, the construction and purchase of workmen's dwellings. There are also building societies for the construction, purchase, sale or renting of such dwellings, which can likewise be organised as limited liability or as co-operative concerns.

The Act of 30 July 1892 extended the facilities granted on 9 August 1889 to building societies, to those credit associations which loan to workmen the sums they require in order to enter into immediate possession of their dwellings. The Act of 16 May 1900 completed the Act of 9 August 1889 by making provisions which avoid, in case of death, the forced sale and subdivision of small inheritances, the income from which, as shown by the land-register, does not exceed 300 francs.

Since the Act of 9 August 1889 became effective the Savings Bank has loaned, through intermediary associations (credit or building societies),

for the construction or purchase of workmen's dwellings a total amount of 109 million francs, thus placing the working classes in possession of some 63,000 houses; 97½ million francs still remained outstanding on these loans at the end of July 1914.

On 31 December 1912 there were 215 societies for workmen's dwellings of which some were connected with the *Caisse* and others not; 151 of these were credit associations, and 64 buildings societies; 197 were organized as limited liability companies and 18 as co-operative associations.

§ 3. AGRICULTURAL CREDIT.

Until 1884 it may be said that there were no legally constituted agricultural credit organs in Belgium, where this form of credit was provided for in a primitive way. It was granted through the land-owner and the dealer in fertilizers, who allowed the farmer a certain time in which to pay for his rent or his requisites, and by the country lawyer who loaned to some the funds entrusted to his care by others. The Act of 15 April 1884, organized agricultural credit on a scientific basis, authorizing the *Caisse* to invest part of its funds in loans made to farmers through the agency of the *Comptoirs agricoles*. These latter are councils formed by no fewer than three persons who must be practical farmers of good repute, organized into a joint stock company. The *Comptoirs* must enquire into the reliability of the applicants for such loans, and the amount which can safely be advanced to them; they must also supervise current business and prosecute recalcitrant debtors. They are collectively liable, and receive as compensation a bonus, known as "*ducroire*," paid by the creditor for the surety afforded. These *comptoirs agricoles*, of which 19 were organized since 1884, met with little success. The credit business carried on through their agency was suspended during the war. On the other hand, the repayments made by farmers during this period were numerous and amounted to 8,994,510 francs from 1 August 1914 to 31 December 1918, so that outstanding loans were reduced from 14,939,344 frs. on 31 July 1914 to 5,966,799 on 31 December 1918, and the number of loans outstanding was reduced from 5,649 to 3,144.

The Act of 21 June 1894 authorized the *Caisse d'Épargne* to grant loans to farmers through co-operative associations or rural credit banks. We have already described the organization of these co-operative institutions and their prosperous development in Belgium. We will now only remind the reader that the rural credit banks, of which there are now nearly one thousand organized on the Raiffeisen system, are united into regional federations, known as central banks, which work on the plan of limited liability. The most important of these banks is that the *Boerenbond* of Louvain, which groups together more than half the rural banks of Belgium and has a branch which transacts land-credit business.

The *Caisse d'Épargne* avails itself of the central banks (of which there are 7) as agents for the distribution of credit to the rural banks.

The Central Bank has a dual function: (1) it controls the local banks, withdrawing the surplus deposits of some and loaning them to others; (2) it guarantees the liabilities contracted by the local banks with the *Caisse d'Épargne*. But the deposits which have accumulated in the hands of the central banks are now so large that the rural banks have little need of the *Caisse* and are able to meet their own needs. The Central Bank of the *Boerenbond* at Louvain held on deposit on 31 December 1918, 212,464,881 francs, of which 168,834,431 were contributed by the 580 member banks (1). In that same year the total value of the credits which it opened in favour of the local banks amounted to 5,269,000 frs., of which 182,163 were utilized; whereas the value of the credits opened by the *Caisse* amounted to 166,000 frs. of which the local banks took no advantage. On the other hand, as a result of the high profits obtained during the war, many farmers have repaid the loans they had made. The local banks repaid during that period a sum of 228,155 frs., so that the total amount of loans was reduced from 401,825 frs. at the end of July 1914 to 173,670 frs. on 31 December 1918. The abundance of money in rural centres led to many credit accounts being closed. Thus, as we see the business activity of this branch of work was not great.

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This rapid review of the work of the several branches of the *Caisse Générale d'Épargne et de Retraite* during the war shows that although it had to operate under circumstances of great difficulty it has come safely out of the trial. The wise provisions of its organic law, and the timely measures taken by the administration to meet the many difficulties encountered, enabled it to pay its depositors during the war years a total amount of 394 million francs, and to continue working during the whole period of occupation, without having recourse to loans, and without closing its doors one single day at its head-office in Brussels. The business transacted in the provinces suffered a brief interruption due to the invasion, but was rapidly resumed. When the country was at last liberated the situation of the *Caisse* was such that it was able to subscribe 200 million francs to the National Loan. With the support of the Government it is now preparing to resume all its work under conditions which may be described as propitious.

(1) See: *Boerenbond belge ou Ligue des Paysans, Exercice 1918. Rapport présenté succinctement à l'Assemblée générale du 9 juin 1919 par le Chanoine Luytgaereus, S. Th. B., Secrétaire Général.* Louvain 1919.

SWITZERLAND.

INSURANCE AGAINST HAIL IN 1917

OFFICIAL SOURCE.

RAPPORT DU BUREAU FEDERAL DES ASSURANCES SUR LES ENTREPRISES PRIVEES EN MATIERE D'ASSURANCE EN SUISSE EN 1917 Publie conformement a la decision du Conseil federal suisse du 1^{er} novembre 1919 32^e Annee A. Franke, Berne, 1919

In 1917 as in earlier years insurance against hail was practised in Switzerland only by two mutual societies, the *Société suisse d'assurance contre la grêle* which has its offices in Zurich and *Le Paragrêle* of Neuchâtel. The former is active throughout the Federation's territory and insures all agricultural produce against the risk of hail. The latter does business only in the canton of Neuchâtel and insures only vines.

In 1917 the damage done by storms accompanied by hail was much greater than in 1916. Forty-one days on which important storms occurred were counted. The falls were distributed over 1,274 communes and 445 districts. These figures do not include small local storms, affecting one or two communes at a time.

§ 1. THE "SOCIÉTÉ SUISSE D'ASSURANCE CONTRE LA GRÊLE."

This Zurich society in 1915 raised from 10 to 20 per cent the rebate of premium allowed to such of the insured as had notified no losses from hail during the last three years. In spite of this circumstance the society was able to record a considerable increase in the premiums it received in 1916. In 1917 the increase of premiums was 523,501 francs, or double the increase in the previous year. At the same time the number of policies increased by 8,478, as against 3,089 in 1916, and the insured sums by 35,105,660 francs as against 16,973,060 francs in 1916.

The indemnities paid for losses were much more than double those paid in 1916: they rose from 1,339,404 francs to 3,412,525 francs. For the first time the ordinary premium of the year, plus the sum taken, as by the rules, from the reserve fund, was not enough to pay indemnities. The society was obliged to levy a supplementary premium equal to 30 per cent. of the first premium. The deficit of 846,226 francs could thus be covered, but the reserve fund, which amounted at the end of 1916 to 4,686,773 francs, was reduced to 3,840,547 francs.

The most important modifications of the society's business in 1916 and 1917 are shown in the following table.

TABLE I. — *The " Société suisse d'assurance contre la grêle" in 1916 and 1917.*

	1916	1917
	francs	francs
Number of policies	71,966	80,444
Insured capital	107,444,180	142,544,850
Premiums received	1,561,440	2,710,286
Indemnities paid	1,339,404	3,412,525
Reserve fund	4,686,774	3,840,547

The figures as to premiums received in 1917 include the supplementary premiums recovered in that year (625,245 francs).

From 1912 to 1917 this society had to record the following numbers of days of hail and declarations of loss.

	1912	1913	1914	1915	1916	1917
Days of hail	44	60	49	59	46	57
Declarations of loss . .	5,816	7,715	5,293	8,816	8,886	14,624

The indemnities paid were equal to the following percentages of the sums insured :

1912	1913	1914	1915	1916	1917	1880-1917
0.8	1.1	0.6	1.5	1.3	2.4	1.4

This percentage therefore increased largely. Costs of administration, on the other hand, lessened, as is shown by the following figures which give the percentages of the ordinary and supplementary premiums received to which these costs were equal :

1912	1913	1914	1915	1916	1917	1880-1917
14.6	17.3	14.8	16.1	15.7	13.6	15.9

The two following tables show the results which these societies obtained from the year of their foundation, 1880, until the end of 1917 (1).

(1) We reproduce certain unofficial data, taken from the report to this society's general meeting recently held in Zurich, as to the society's development in 1919.

In 1919 it received an additional and very notable increase. The number of policies increased from 80,444, their number in 1917, to 91,262; the insured capital from 142,549,840 francs, its amount in 1917, to 224,500,000 francs; the reserve fund from 3,840,547 francs, its amount in 1917, to 7,798,086 francs.

TABLE II. — Results obtained by the 'Société suisse d'assurance contre la grêle' from its foundation to the end of 1917.
(2) Profit and Loss Account 1880 to 1917.

Year	Incomings			Total incomings	Outgoings		Profits	Losses
	Premiums	Supplementary net premiums	Other Incomings (interest on capital, etc.)		Indemnities	Costs of administration and taxes		
	France	France	France	France	France	France	France	France
1880-1889	1,474,739.49	486,712.80	61,162.14	1,862,614.43	1,408,799.35	399,944.95	175,564.39	148,691.26
1890	203,273.50	—	3,891.50	207,165.00	129,107.30	40,676.87	38,081.73	—
1891	284,126.40	—	3,535.61	287,662.01	174,709.85	41,456.80	31,083.51	—
1892	347,322.90	—	31,935.31	379,258.21	174,709.85	56,377.72	123,530.06	—
1893	416,000.40	—	10,540.04	426,540.44	174,709.85	63,182.86	138,357.73	—
1894	467,660.65	—	14,131.51	481,792.16	310,320.90	71,178.46	118,779.79	—
1895	584,647.70	—	20,672.46	605,320.16	451,237.10	79,445.47	64,837.59	—
1896	716,068	—	24,928.61	740,996.61	628,276.60	101,378.80	24,860.13	—
1897	703,220.10	—	24,928.61	728,148.71	595,963.20	101,378.80	29,333.30	—
1898	846,637.50	—	31,072.20	877,709.70	453,891.60	114,077.05	307,132.13	—
1899	723,612	—	33,072.20	756,684.20	103,080.10	103,520.14	46,613.96	—
1900	762,760.31	—	54,314.67	817,074.97	480,793.80	120,637.11	127,332.69	—
1901	701,598.60	—	63,749.26	765,347.86	649,812.20	113,412.08	66,519.85	—
1902	671,021.90	—	61,236.25	732,258.15	389,911.20	113,412.08	37,882.11	20,033.10
1903	808,502.80	—	67,026.11	875,528.91	556,248.70	129,237.08	-37,842.30	—
1904	844,324.80	—	79,803.8	924,128.60	684,836.60	133,915.20	157,741.53	—
1905	879,950.20	—	96,586.02	976,536.22	308,363.10	125,961.01	660,941.87	—
1906	936,054.40	—	104,313.19	1,040,367.59	1,001,741.20	134,890.27	104,890.27	—
1907	871,271.90	—	115,500.57	986,772.47	903,925.20	179,507.17	68,941.27	—
1908	1,036,388.10	—	126,003.07	1,162,391.17	310,671.40	117,419.42	63,897.05	—
1909	1,060,503	—	140,114.40	1,200,617.40	1,104,378.10	193,045.31	88,304.01	—
1910	1,138,312.80	—	140,394.42	1,278,707.22	1,104,378.10	200,724.84	341,571.2	—
1911	1,153,785.60	—	158,120.25	1,311,905.85	640,840.80	197,112.84	636,069.05	—
1912	1,040,821.70	—	158,120.25	1,198,941.95	781,684.70	178,255.19	217,093.40	—
1913	1,308,616.40	—	171,841.02	1,480,457.42	507,402	193,201.11	755,254.31	—
1914	1,394,093.50	—	188,739.94	1,582,833.44	1,303,481.90	211,275.11	116,021.57	—
1915	1,564,539.90	—	213,293.97	1,777,833.87	1,339,404.20	211,180.40	195,951.18	—
1916	2,065,041.20	—	239,621.68	2,304,662.88	3,414,744.70	374,908.96	84,626.16	—
1917	26,038,299.34	1,165,927.42	2,501,866.96	29,605,113.72	21,405,171.73	4,318,398.65	5,683,199.10	1,735,641.85
TOTAL	27,152,286.76	—	—	29,605,113.72	21,405,171.73	4,318,398.65	5,683,199.10	1,735,641.85
					78.8 %	15.9 %	3,939,547.34	on 14.5 % of premiums received

TABLE III. — Results obtained by the "Société suisse d'assurance contre la grêle" from its foundation until the end of 1917.
Percentages which items of receipt and expenditure formed of insured sum.

Year	Number of policies	Insured sum	Receipts and expenditure as percentages of insured sum					Receipts and expenditure formed of insured sum.				
			Receipts		Expenditure			Receipts		Expenditure		
			Premiums	Supplementary premiums	Other receipts	Total	Indemnities	Costs of admini- stration and taxes	Profits	Losses		
			France	France	France	France	France	France	France	France	France	France
1880-1889.	68,633	81,904,741	1.56	0.60	0.07	2.23	1.72	0.48	0.21	0.18		
1890	10,204	11,461,490	1.79	—	0.03	1.82	1.13	0.35	0.34	—		
1891	16,981	16,837,070	1.67	—	0.02	1.69	1.20	0.31	0.18	—		
1892	22,290	20,470,340	1.60	—	0.03	1.72	0.85	0.27	0.60	—		
1893	26,673	23,766,350	1.64	—	0.04	1.68	0.73	0.27	0.06	—		
1894	31,181	29,280,050	1.94	—	0.04	1.98	1.74	0.24	0.00	—		
1895	34,681	29,231,700	1.99	—	0.07	2.06	1.54	0.30	0.22	—		
1896	37,404	33,752,790	2.12	—	0.08	2.20	1.86	0.33	0.01	—		
1897	38,322	33,259,950	2.18	—	0.07	2.19	1.80	0.30	0.00	—		
1898	43,597	36,767,300	2.08	—	0.06	2.06	1.17	0.29	0.80	—		
1899	44,576	36,492,820	1.98	—	0.09	2.07	0.49	0.29	1.49	—		
1900	43,397	37,841,500	1.98	—	0.14	2.12	1.52	0.30	0.33	—		
1901	43,273	37,249,900	1.98	—	0.18	2.06	1.50	0.32	0.16	—		
1902	44,499	37,762,100	0.79	—	0.17	1.96	1.72	0.31	0.86	0.07		
1903	43,295	43,295,820	1.87	—	0.25	2.02	0.90	0.26	0.90	—		
1904	50,444	46,765,840	1.86	—	0.17	1.97	1.37	0.28	0.32	—		
1905	54,913	49,657,870	1.77	—	0.20	1.97	1.38	0.27	0.32	—		
1906	55,454	53,795,920	1.73	—	0.19	1.92	0.57	0.23	1.12	—		
1907	55,560	55,264,760	1.59	—	0.20	1.79	1.81	0.28	—	0.30		
1908	59,839	64,307,180	1.61	—	0.18	1.79	1.41	0.28	0.11	—		
1909	62,463	62,395,690	1.54	—	0.19	1.74	0.50	0.24	1.00	—		
1910	60,456	67,450,760	1.37	—	0.22	1.79	1.64	0.28	—	0.13		
1911	65,931	71,322,080	1.59	—	0.20	1.79	1.99	0.28	—	0.48		
1912	65,361	70,856,960	1.69	—	0.22	1.86	0.81	0.25	0.60	—		
1913	63,407	71,173,120	1.61	—	0.22	1.70	1.10	0.25	0.35	—		
1914	66,897	80,865,170	1.61	—	0.21	1.82	0.53	0.24	0.96	—		
1915	68,877	90,471,120	1.43	—	0.21	1.64	0.54	0.23	0.18	0.13		
1916	71,966	107,444,180	1.45	—	0.20	1.65	1.25	0.23	—	—		
1917	80,444	122,549,840	1.46	0.44	0.16	2.06	2.39	0.26	—	0.39		
TOTAL . . .	1,491,718	1,554,401,521	1.68	0.07	0.16	1.91	1.38	0.28	0.36	0.11		

§ 2. "LE PARAGRÊLE."

"Le Paragrêle" kept the number of its insured almost intact in 1917, and the sums it insured and the amount of its premiums did not change importantly. As much cannot be said of the indemnities paid for they increased enormously. In spite of this fact the society could pay 4,600 francs into its reserve fund (31,750 francs in 1916), so that this fund amounted at the end of 1917 to 145,000 francs.

The most important modifications of this society's business in 1916 and 1917 appear in the following table.

TABLE IV. — "*Le Paragrêle*" in 1916 and 1917.

	1916	1917
	francs	francs
Number of policies	527	526
Insured capital	559,943	589,021
Premiums received.	33,649	35,395
Indemnities paid	2,955	31,089
Reserve fund	140,500	145,100

The society recorded only four days of hail in 1917, namely 7 June, 4 July and 14 and 19 August.

In spite of the damage caused by hail to the vines of the Neuchâtel district, the year was not a bad one.

The indemnities paid by the society from 1912 to 1917 were equal to the following percentages of the sums insured :

1912	1913	1914	1915	1916	1917
0.6	20.1	4.2	0.1	0.5	5.3

The variations of these percentages are obviously enormous, given the small field of "Le Paragrêle's" operations.

Costs of administration were equal to the following percentages of the sums received as premiums :

1912	1913	1914	1915	1916	1917
12.9	11.1	13.5	11.8	12.4	17.5

TABLE V. — *Subsidies to Insurance against Ill in 1917.*

Canton	Number of policies	Insured Sum Francs	Premiums Francs	Cantonal Subsidies (including federal grants)			Federal grants Francs
				(a) Cost of policy Francs	(b) Grant for premium, Francs	(c) Total Francs	
1. Zurich	6,164	10,945,760.00	171,066.50	6,302.95	21,363.32	27,746.27	26,564.67
2. Berne	17,139	30,060,390.00	456,977.30	15,570.60	40,909.42	62,480.02	63,480.02
3. Lucerne	7,474	22,681,600.00	353,415.00	6,123.60	35,311.56	41,405.16	41,405.16
4. Schwyz	1,110	2,291,040.00	46,943.90	107.25	4,691.39	4,891.64	4,891.64
5. Upper Unterwald	1,001	322,100.00	25,411.80	891.15	2,511.16	3,435.33	3,435.33
6. Lower Unterwald	541	870,380.00	17,666.20	—	1,766.20	1,766.20	1,766.20
7. Zug	1,340	3,235,260.00	59,522.80	1,563.00	10,416.49	11,979.49	8,601.35
8. Fribourg	2,449	6,206,970.00	59,555.70	2,223.00	5,955.57	8,178.57	8,178.57
9. Solothurn	6,110	7,180,440.00	76,610.80	5,320.50	7,703.22	13,023.72	13,002.62
10. Basle-town	51	289,380.00	3,072.00	55.80	793.62	849.42	470.58
11. Basle-country	3,292	3,031,790.00	35,945.90	2,699.55	5,639.09	8,338.64	7,683.85
12. Schaffhouse	2,390	3,278,300.00	41,321.00	1,999.20	5,105.13	7,104.32	7,164.31
13. Appenzell-Extérieur	997	1,281,810.00	20,484.50	852.30	2,500.50	3,412.86	3,412.85
14. Appenzell-Intérieur	145	326,810.00	3,471.20	72.50	260.31	332.81	332.84
15. St. Gall	4,809	6,315,150.00	75,128.20	6,451.35	7,924.10	14,375.45	11,970.94
16. Argovie	13,399	11,697,766.00	149,391.90	10,760.85	13,103.98	23,864.83	23,864.83
17. Thurgovie	4,426	5,538,290.00	63,539.30	3,514.65	8,867.11	12,411.76	12,411.75
18. Vaud	4,531	14,883,990.00	238,853.80	9,109.15	39,894.51	49,003.66	44,037.65
19. Valais	73	78,160.00	3,232.00	124.10	485.40	609.50	549.90
20. Neuchâtel	1,441	2,183,561.00	75,020.85	394.12	18,746.73	19,140.85	14,559.08
21. Geneva	952	3,710,030.00	142,811.00	1,221.05	42,852.20	44,073.25	28,642.89
TOTAL 1917	79,884	142,117,917 —	2,119,472.25	75,539.67	283,004.12	358,543.78	325,487.45
" 1916	73,104	107,984,052.50	1,594,956.15	68,005.35	216,890.16	284,895.51	258,687.97
" 1915	68,829	91,014,971 —	1,331,880.27	65,233.45	183,045.42	248,278.87	225,395.56
" 1914	66,661	81,356,404 —	1,324,499.82	69,017.25	192,441.25	261,458.50	261,458.47

§ 3. STATE SUBSIDIES TO INSURANCE AGAINST HAIL, IN 1917.

Finally, we should notice the great importance to insurance against hail in Switzerland of the grants made by the Federation and the cantons.

These grants are made as by cantonal laws and the federal law of 22 December 1893 as to the improvement of agriculture by the Federation. Twenty-one cantons make such grants, namely all of them except Uri, Glaris, Ticino and the Grisons, which thus prevent their territories from receiving the federal grants to insurance against hail. All the other cantons make themselves responsible for a proportion of premiums and the cost of policies which varies from 15 to 4 per cent. The Federation in its turn reimbursed the canton, down to 1914, for half such disbursements. But on 11 December 1914 the Federal Council issued a decree which limits federal grants (a) in the case of insurance policies to 50 per cent. of costs; (b) in the case of insurance premiums to 20 per cent. of outgoings when vines are insured and 12.5 per cent. when other crops are insured.

Table V (page 416) contains data as to the amount of the cantonal and federal grants to insurance against hail in 1917.

While federal and cantonal grants previously amounted to the same sum, the former now amount to little more than nine tenths of the latter.

Part III: Credit

AUSTRALIA.

GOVERNMENT LOANS TO FARMERS.

SOURCES (OFFICIAL):

OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA, NO. 12, CONTAINING AUTHORITY-ITATIVE STATISTICS FOR THE PERIOD 1901-1908 (Melbourne, 1919) and previous issues.

In all the States of the Commonwealth of Australia, systems of government loans to farmers have been established. These systems are described in the latest issue of the Official Year Book and we here reproduce the description, to which we add statistics drawn in part from earlier issues.

§ 1. NEW SOUTH WALES.

Initial legislation. — New South Wales adopted the principle of advances to settlers on 4 April 1889, when the Advances to Settlers Act received assent. The objects of this Act were to authorise the raising of a loan for making temporary advances to settlers; to provide for the making and repayment of such advances; and for purposes incidental to, or consequent on, those objects. In order to provide the funds necessary for the carrying out of this Act, the Colonial Treasurer was authorised to sell inscribed stock, secured upon the Consolidated Revenue, to an amount not exceeding £500,000, to be sold in amounts of £10 or some multiple of £10 and bearing interest at the rate of 3 ½ per cent. per annum, payable half-yearly. A board consisting of not more than three members, appointed by the Governor, called the Advances to Settlers Board, was appointed to deal with applications for loans and to decide whether they should be granted. The maximum amount that was authorised to be advanced to any one person was £200, which was to be repaid in full, together with interest at the rate of 4 per cent., within ten years of the making of the loan, but on no account was a loan to be granted except on the recommendation of the Board and when the security given was deemed satisfactory. An Amendment Act

was passed in 1902, by which the advance limit of £200 was increased to £500, and the period within which repayments were to be made was extended to thirty-one years. In the latter part of the same year a further Amendment Act came into force. Under the provisions of this Act the amount of inscribed stock was increased to £1,000,000, and the maximum amount of advance to any person was raised to £1,500, interest on the latter being payable at the rate of not less than 4 per cent. per annum.

Legislation now in force. — The above Acts were all repealed by the Government Savings Bank Act of 1906, which received assent on 21 December of that year. All property held by the Advances to Settlers Board was to be vested in three Commissioners appointed under this Act, who were styled "The Commissioners of the Government Savings Bank of New South Wales." An Advances Department of the Savings Bank was constituted, and debentures to the amount of £305,000 (that being the amount of stock issued under the Advances to Settlers Act and held at the beginning of this Act) were issued, an equivalent amount of Government stock transferred to the Savings Bank Department being, at the same time, cancelled. All monies, securities, documents, property, etc., held by or on behalf of the Advances to Settlers Board were transferred to, and became vested in, the Commissioners, and were carried to the accounts of the Advances Department of the Savings Bank. This Act was amended in 1913, 1914 and 1916.

Security on which, and objects for which, advances are made. — The Commissioners are authorised to issue debentures to the amount of £2,000,000, bearing interest at such rate as they may determine. They may lend monies from the Advances Department (a) upon mortgages of an estate of inheritance in fee simple in any land of the State; (b) upon mortgage of conditional purchases with or without associated conditional leases, homestead grants or selections, settlement leases or purchases, conditional, additional conditional, or special conditional purchase leases, Crown leases, homestead farm leases, irrigation farm leases, or any holding which has been converted into any of the foregoing tenures under the Crown Lands Acts; and (c) on deposit at call or for periods not exceeding two years in the Treasury or any bank of issue in the State, or on deposit in the Savings Bank Department. Loans may be made for any of the following purposes:— (a) To pay off existing encumbrances or to purchase the land; (b) to pay off money to the Crown in respect of the land; (c) to make improvements or to develop the agricultural or pastoral resources of the land; and (d) to build homes on the land.

Amount and repayment of advances. — No loan to any one person may amount to less than £50 or more than £2,000, and applications for loans not exceeding £500 have priority over those of a larger amount. Advances may be made up to two-thirds of the value of the interest of the borrower in the land, buildings and improvements, except where the land is held as a conditional lease, homestead grant, settlement lease, homestead selection, settlement purchase, in connection with which the conditions of residence and improvements have not been completed, conditional,

additional conditional, or special conditional purchase lease, Crown lease, homestead farm lease, or irrigation farm lease, or a conditional purchase as to which the first five years' certificate has not issued, in which cases the amount advanced may not exceed three-fourths of the holder's interest in the improvements. Loans are made only in respect of first mortgages, and except in the case of loans on the security of freeholds or certificated conditional purchases, are repayable by equal half-yearly instalments within such period, not exceeding thirty-one years, as the Commissioners think fit. Loans granted on the security of freeholds and certificated conditional purchases are repayable either in the same manner as loans on other securities just mentioned, or at the expiration of a fixed term not exceeding five and a-half years, during which period interest only is payable.

TABLE I. — *Loans to Farmers in New South Wales.*

Year	Number of applications approved during year ended 30 June	Total advanced to 30 June	Balance due at 30 June	Annual profits during year ended 30 June	Accumulated profits to 30 June
		£	£	£	£
1904	(1)	502,828	392,745	(1)	(1)
1905	452	563,596	406,405	(1)	(1)
1906	532	617,623	411,208	(1)	(1)
	During year ended 31 December	To 31 December.	At 31 December.	During year ended 31 December.	To 31 December.
1906	(2)	683,309	401,741	(1)	(1)
1907	424	789,334	243,511	(1)	(1)
1908	1,308	1,062,125	(3) 591,292	4,611	6,583
1909	1,077	1,362,854	(3) 795,113	5,390	8,039
1910	895	1,617,142	928,086	8,200	15,606
1911	475	1,118,885	1,074,358	9,543	25,349
1912	1,929	2,423,055	1,396,336	10,335	35,684
	During year ended 30 June	To 30 June	At 30 June	During year ended 30 June	To 30 June
1914	(4)	3,531,213	2,297,891	(5)	56,630
1915	(1)	3,918,975	2,514,078	15,111	71,741
1916	(1)	4,119,842	2,513,332	16,633	88,374
1917	(1)	4,281,697	2,522,674	17,477	104,898
1918	(1)	4,514,157	2,544,054	17,446	120,085

(1) Not available. — (2) The number of applications approved during the six months ended 31 December 1906 was 245. — (3) Balance after deduction of special principal payments in advances. — (4) The number of applications approved during the 18 months ended 30 June 1914 was 1,534. — (5) The profits during the 18 months ended 30 June 1914 were £ 20,946.

Advances on purchases of farms. — To facilitate close settlement on private estates suitable for the purpose, the Commissioners are authorized to make advances in order to assist persons in purchasing land. In the case of such advances the title to the land must be either freehold or certificated conditional purchase, and the amount advanced may not exceed 80 per cent. of the Commissioners' valuation.

Statistics. — Table I (page 420) contains statistics of advances made to farmers in New South Wales.

§ 2. VICTORIA.

Legislation. — The Advances Department of the Government Savings Bank of Victoria was established by the Savings Bank Act of 1896. This Act has been frequently amended, and in 1915 the various Acts and amendments were consolidated under the title of the State Savings Bank Act of 1915. This latter Act was amended twice in 1915 and again in 1916. For the purpose of advancing money to settlers and others, a branch of the bank called the *Crédit foncier* Department was established which was authorised to borrow on debentures or mortgage bonds up to a sum of £6,000,000.

Security on which advances are granted. — In order to assist farmers, graziers, market gardeners, or other persons employed in agricultural, horticultural, viticultural, or pastoral pursuits, the Savings Bank Commissioners are empowered to make advances, by instalments or otherwise, upon the security of any lands held by such person either (a) in fee simple, or (b) under a Crown lease in which the rent received is taken by the Crown in part payment of the lands demised. Security must be, in every case, a first mortgage. A loan may be either in cash, or in debentures or mortgage bonds at par face value at the option of the Commissioners.

Amount of advances. — The limits of the advances are £50 and £2,000, as in New South Wales, applications for advances under £500 having also similar priority. The amount of the advance which may be made for land held in fee simple or under lease as specified in (b) above must not exceed two-thirds of the actual value of such land at the time of the advance. In the case of land held under lease as aforesaid, such two-thirds value must be reduced by the amount of all rent payable in respect of the land previous to the issue of a Crown grant for such. If the person appointed by the Commissioners as valuator of any land held under lease as above, certify that the improvements effected thereon increase the productive power of the land and are equal to at least £1 per acre, and that the value of such land and improvements exceeds £2 per acre, the Commissioners may make, notwithstanding anything contained above, an advance of fifteen shillings for every acre so improved.

Special provision for vineyards, orchards, etc. — In the case of land which has acquired a special increase of value by reason of being cultivated as vineyards, hop-grounds, orchards, fruit-growing plantations etc., advances may be made on the following terms — (a) The total amount which may

be at any time advanced upon any such lands may not be more than £100,000 in the whole. (b) The amount of two-thirds of the actual value referred to above may be increased by one-quarter of any special increase in value, but such increase is in no case to be considered as greater than £30 an acre. (c) No advance may be for a longer period than fifteen years.

Purposes for which advances granted. — Advances are made for the following purposes only: — (a) To pay off existing liabilities; (b) to pay off money owing to the Crown in respect of the land; (c) to make improvements or to improve and develop the agricultural, horticultural, viticultural or pastoral resources of the land.

Repayment of advances. — The rate of interest charged on loans is fixed at 4 $\frac{1}{2}$ per cent. per annum, but, by the Amendment Act of 1915, it may be altered from time to time by the Commissioners, subject to the approval of the Governor in Council. All advances, together with interest, must be repaid by sixty-three half-yearly instalments, or such smaller number as may be agreed upon between the borrower and the Commissioners.

Statistics. — Table II contains statistics of the advances made to farmers in Victoria.

TABLE II. — *Loans to Farmers in Victoria.*

Year	Total number of applications approved during year ended 30 June	Total advanced to 30 June	Balance due at 30 June	Annual profits during year ended 30 June	Accumulated profits to 30 June
		£	£	£	£
1904	(1)	1,749,409	(2) 1,321,510	6,901	41,177
1905	421	1,890,299	(2) 1,350,515	7,330	48,507
1906	431	2,021,333	(2) 1,328,547	7,260	55,768
1907	325	2,111,308	(2) 1,225,805	6,430	62,198
1908	390	2,251,455	(2) 1,202,785	6,751	68,949
1909	502	2,192,698	(2) 1,293,404	7,037	75,987
1910	416	2,657,713	(2) 1,306,425	5,026	81,913
1911	339	2,797,323	1,305,657	3,022	(3) 84,936
1912	350	2,954,618	1,343,834	3,069	(3) 88,006
1913	466	3,208,903	1,511,798	5,203	(3) 93,209
1914	424	3,491,008	1,676,432	9,100	(3) 102,309
1915	(1)	3,714,733	1,783,043	10,102	112,411
1916	(4)	3,866,952	1,833,988	14,000	126,411
1917	(4)	4,040,582	1,920,737	15,623	142,064
1918	(4)	4,204,582	1,957,694	14,284	156,348

(1) Not available: the total number of applications approved to 30 June 1904 was 5,278. — (2) Balance after deduction of special principal payments in advances. — (3) Including profit in connection with house and shop loans. — (4) Not available.

§ 3 QUEENSLAND.

Legislation. — The Queensland Government was authorized, under the Agricultural Bank Act of 1901, to establish a bank for the purpose of promoting the occupation, cultivation, and improvement of the agricultural lands of the State and a body of three trustees was appointed to administer the Act. The original Act was amended in 1904, 1905, 1911 and 1915, and in 1916 it was repealed by the Queensland Government Savings Bank Act of 1916, when the duties of the trustees under the former Act were transferred to the Commissioner of the Government Savings Bank. In order to provide for the amount of the unpaid balances of all monies advanced under the Agricultural Bank Act, and also to obtain funds for the purpose of making advances, the Commissioner may raise, by the issue of debentures, any sum of money which, with the above mentioned balances, shall not exceed £5,000,000.

Security on which, and purposes for which, advances are made. — Advances may be made to owners of agricultural lands or to occupiers of Crown lands held either as agricultural, grazing, prickly-pear or unconditional selections, and may be made for any of the following purposes: — (a) the payment of existing liabilities, (b) agricultural, dairying, grazing, horticultural, or viticultural pursuits on the holding; (c) adding to the improvements already made; (d) the purchase of stock, machinery, or implements; (e) not exceeding £100 for unspecified purposes, provided the applicant is a bona fide resident settler. Advances are only made on the security of first mortgages.

Amount and repayment of advances. — The amount which may be advanced must not exceed fifteen shillings in the pound of the fair estimated value of the holding with the improvements thereon and no advance to any one person must exceed £1,200. Advances not exceeding on the whole £300, may be made to the full value of the improvements proposed to be made, for any of the following purposes, namely: — Buildings, up to £80; ringbarking, clearing, fencing, or water conservation, up to £200; providing a well or bore, up to £150. Where the holder of agricultural land has an area of thirty-five or more acres cleared and sown with Rhodes grass, or any other approved grass, an amount not exceeding £100 may be advanced for the purchase of approved dairy stock to the full value of the improvements already made. The Commissioner may require, in addition to any other security, a lien over the stock so purchased. No advance may be made to any alien who has not first obtained a certificate that he is able to read or write from dictation words in such language as the Commissioner may direct. During the first five years following the date of the loan, the borrower must pay interest at the rate of 5 per cent. per annum. After the expiration of that period the loan, together with interest, must be repaid by half-yearly instalments within twenty years, the amount of such half-yearly instalment being £4 os. 3d. for each £100 advanced. Advances made on the security of a mortgage of a grazing selection must be repaid,

with interest at 5 per cent. per annum, within a term ending not later than the date upon which the lease would expire. Any advances under this Act may, at the option of the borrower, be repaid sooner or in larger instalments than herein specified. .

Statistics. — Table III contains statistics of the advances made to farmers in Queensland.

TABLE III. — *Loans to Farmers in Queensland.*

Year	Number of applications approved during year ended 30 June	Total advanced to 30 June	Balance due at 30 June	Annual profits during year ended 30 June	Accumulated profits at 30 June
		£	£	£	£
1904	116	21,020	20,370	84	—
1905	296	39,378	38,417	53	—
1906	558	98,484	94,268	444	246
1907	313	129,361	112,216	1,051	1,297
1908	319	153,228	119,344	1,326	2,623
1909	430	187,014	136,946	1,405	4,028
1910	680	235,793	163,640	1,974	6,003
1911	905	306,944	206,997	2,548	8,551
1912	(1)	430,403	306,652	3,318	11,869
1913	(1)	623,498	470,795	3,354	15,223
1914	(1)	851,000	636,79	2,983	18,206
1915	(1)	1,147,996	880,204	4,448	22,654
1916	(1)	1,517,040	1,186,895	6,674	29,528
1917	(1)	1,810,910	1,428,530	(2)	(2)
1918	(1)	2,026,823	1,525,649	(2)	(2)

(1) Not available. — (2) Not shown since amalgamation with Government Savings Bank.

§ 4. SOUTH AUSTRALIA.

Legislation. — Under the State Advances Act of 1895, amended in 1896, 1901 and 1912, a State Bank has been established in South Australia for the purpose of making advances (1) to the farmers, graziers, and other producers and in aid of industries, upon the security of lands held in fee simple or under Crown lease; and (2) to local authorities, upon the security of their

rates. The bank, managed by a board consisting of five trustees appointed by the Governor, has funds raised by the issue of mortgage bonds, carrying interest at a rate not exceeding $4\frac{1}{2}$ per cent., payable half-yearly, to an amount not greater than the total amount due to the bank for State advances, and in any case not greater than £3,000,000. By the Amending Act of 1912, a fund called The Loan to State Bank Fund was constituted, and the Treasurer was empowered to raise any sum or sums of money up to £400,000 in any one financial year, and not exceeding in the aggregate at any time a sum of £3,000,000, by the issue and sale of Government Inscribed Stock or Treasury Bills, for the purpose of purchasing or taking up from the bank, mortgage bonds for such amounts as are required by the bank. The Advances to Settlers on Crown Lands Act, and the Loans to Producers Act, were passed in 1908 and 1917 respectively, and are referred to below. Several Acts have, from time to time, been passed dealing with seed wheat advances.

Amount and repayment of advances. — No advance to farmers, graziers, or other producers, or in aid of any industry, may exceed three-fifths of the unimproved value of the fee simple of the land and permanent improvements thereon, and if the land has acquired a special additional value by reason of cultivation as a vineyard or orchard, *plus* one-third of such special additional value. If the advance be on the security of a Crown lease, the amount of the loan may not exceed one-half the selling value of the lease including the interest of the holder in any improvements on the land. The amount lent to any one person at any time may not exceed £5,000. Advances are repayable by half-yearly instalments, the rate of interest, up to the limit of 5 per cent. per annum, being a matter of arrangement between the bank and the borrower. Security must be, in every case, a first mortgage, but, with the exception of the State Advances Act, a second mortgage may be taken as collateral security. The balance, or any portion thereof, of the principal money owing in respect of any State advance may be paid, with all interest due thereon, on the day appointed for any half-yearly payment.

The Advances to Settlers on Crown Lands Act. — This Act was passed in 1908 and subsequently amended in 1909, 1911, and 1912. The Act with amendment was consolidated in 1914, and again amended in 1915 and 1916, and is administered by a board called the Advances to Settlers Board. The Treasurer is authorised to set apart a sum not exceeding £20,000 in any one financial year for the purpose of loans to settlers. The maximum amount which may be advanced to any one settler is £850, and for a period of five years following the date on which the advance is made the settler is required to pay interest at a rate fixed by the Treasurer, payable half-yearly. At the expiration of that period it is provided that he must repay the amount advanced by seventy equal half-yearly instalments together with simple interest at the fixed rate on the balance outstanding. A rebate of interest at a fixed rate is allowed if the half-yearly payment is made within fourteen days of the date on which it falls due. All advances made to settlers for the purpose of stocking their holdings must be repaid, together with simple

interest at the fixed rate, within such time, and by such instalments, as the board may determine. Advances may be made on the prescribed security for the purpose of: — (a) making improvements on a holding such as ring-barking, clearing, fencing, boring for water, erecting permanent buildings etc.; (b) stocking a holding; (c) discharging any mortgage existing on a holding; and (d) any other purpose. The amounts which may be advanced for the above mentioned purposes are for: — (a) any sum, not exceeding £400, up to the fair estimated aggregate value of the holding and the improvements made on or about to be made thereof, or in case such estimated value is in excess of £400, any further sum not exceeding £250, up to three-fourths of the amount of such excess; (b) any sum, not exceeding £200; and (c) and (d) any sum, not exceeding three-fourth of the fair estimated aggregate value of the holding and the improvements thereon. Under this Act, the Commissioner of Crown Lands may, on the application of a settler, erect on such settler's holding water improvements, in the nature of sheds having rain-water catchment roofs, and tanks connected therewith for the storage of water. The cost of such improvements are deemed to be an advance from the board, and the settler is obliged to execute a first mortgage on his holding, in order to secure to the board the due payment of the advance.

TABLE IV. — *Loans to Farmers in South Australia.*

Year	Number of applications approved during year ended 31 March	Total advanced to 31 March	Balance due at 31 March	Annual profits during year ended 30 March	Accumulated profits to 31 March
		£	£	£	£
1904	230	889,976	602,641	3,050	15,552
1905	126	925,071	582,214	3,116	18,669
1906	180	1,011,110	602,365	3,314	21,984
1907	146	1,109,362	613,730	3,598	25,582
1908	210	1,233,264	631,413	3,797	29,380
1909	718	1,386,153	668,535	4,218	33,598
1910	234	1,544,946	710,316	4,587	38,186
1911	190	1,786,762	819,818	6,662	44,848
1912	145	2,064,583	966,670	6,289	51,137
1913	506	2,370,076	1,150,020	*8,218	59,355
1914	706	2,601,450	1,264,417	9,376	68,731
1915	(1)	2,769,609	1,330,026	10,668	79,399
1916	(1)	2,831,631	1,300,877	11,670	91,069
1917	(1)	2,847,017	1,232,705	11,400	102,469
1918	(1)	2,956,859	1,223,897	11,454	113,923

(1) Not available.

The Loans to Producers Act 1917. — Under the provisions of this Act, any owner of a freehold estate or holder of a Crown lease may obtain loans for one or more of the following purposes:— (a) the purchase of fruit grading machinery, (b) the erection of silos, and (c) any other prescribed purpose. Advances must be repaid, together with simple interest at the fixed rate, within such time and by such instalments as the Minister may determine.

Statistics. — Table IV (page 426) contains statistics of advances made to farmers in South Australia. It should be noted that the figures include loans to local bodies on the security of their own rates.

§ 5. WESTERN AUSTRALIA.

Legislation. — By the Agricultural Bank Act of 1894 the Governor of Western Australia was empowered to establish a bank for the purpose of promoting the occupation, cultivation, and improvement of the agricultural lands of the State. This Act was amended from time to time until a consolidating Act was passed in the year 1906 repealing all previous enactments on the subject. Under this last Act the bank was placed under the control of three trustees, appointed by the Governor, in whom is vested the whole of the bank property. The necessary funds are provided for by the issue of mortgage bonds bearing interest at a rate not exceeding 4 per cent. per annum. The amount authorized to be raised was £1,000,000, but by subsequent Amending Acts, this was raised successively to the present total of £4,500,000. Amendments to the consolidated Act of 1906 were made in 1907, 1909, 1910, 1911, 1912, 1913, 1914 and 1917.

Purposes for which advances may be made. — The bank is authorized to make advances to persons engaged in the business of farming or grazing, or in agricultural, horticultural or pastoral pursuits, or in any industry that the Governor may by proclamation declare to be a rural industry, for any purpose incidental to or in aid of any such business pursuit, or industry, including the erection of a dwelling house.

Amount of advances. — The amount advanced to any one borrower cannot exceed £2,000 and no advance for the purpose of any proclaimed rural industry can exceed a sum limited by the proclamation relative to such rural industry. Advances are made only on a first mortgage, but a second mortgage may be taken as collateral security.

Repayment of advances. — During the five years following the date of the loan the borrower pays interest only, at such rate per annum as may be prescribed. If the rate of interest be more than 5 per cent., it must not exceed by more than 1 per cent. per annum the rate payable on funds raised by the bank. After the expiration of the above period the amount advanced, with interest at the prescribed rate, must be repaid within twenty-five years by equal half-yearly payments. Whenever an advance is made for any purpose other than that of effecting improvements it must be repaid, together with interest at 6 per cent. per annum, by half-yearly in-

instalments within such period, not exceeding twenty-five years, as the trustees think fit. Advances may be repaid by larger instalments than specified, and at any time within the prescribed period.

Statistics. — Table V contains statistics of advances to farmers in Western Australia.

TABLE V. — *Loans to Farmers in Western Australia.*

Year	Number of applications approved during year ended 30 June	Total advances to 30 June	Balance due at 30 June	Annual profits during year ended 30 June	Accumulated profits to 30 June
1904	(1)	215,000	189,626	2,036	3,024
1905	795	297,600	250,503	2,409	5,433
1906	1,073	394,164	323,464	3,754	9,187
1907	1,604	525,177	420,534	3,988	13,357
1908	2,153	743,598	610,202	4,637	18,194
1909	2,628	1,004,675	825,239	6,061	24,255
1910	2,502	1,257,082	935,960	6,823	31,078
1911	2,636	1,540,241	976,811	6,753	37,831
1912	3,392	1,946,184	1,280,732	8,060	45,892
1913	3,442	2,582,937	1,883,957	9,783	55,675
1914	2,601	3,089,575	2,331,959	9,607	65,282
1915	(1)	3,361,158	2,561,679	9,363	74,645
1916	(1)	3,533,493	2,695,550	7,706	82,351
1917	(1)	3,626,658	2,753,559	2,894	85,245
1918	(1)	3,700,488	2,789,386	2,371	88,234

(1) Not available.

§ 6. TASMANIA.

Legislation. — Under the State Advances Act 1907, an agricultural bank, administered by three trustees appointed by the Governor, was established for the purpose of making advances to promote the agricultural development of the State. Funds were raised by the issue of debentures or inscribed stock for a sum not exceeding £150,000, interest at a rate determined by the Treasurer being payable on same. This Act was the subject of amendments in 1912, 1914 and 1916.

Security on which, and objects for which, advances are made. — The trustees may make advances on the prescribed security to farmers, graziers,

and persons engaged in agricultural, dairying, grazing, or horticultural pursuits, owning land in fee simple or holding land under purchase from the Crown upon the credit system, for any of the following purposes: — (a) The payment of liabilities already existing on the holding; (b) agricultural, dairying, grazing or horticultural pursuits on the holding; and (c) making or adding to improvements.

Amount of loans. — The minimum amount of any loan is £25, and the maximum £1,000. No advance on the security of freehold land may exceed three-fifths of its capital value as estimated by the trustees, and in respect of land held from the Crown under the credit purchase system, the advance may not exceed one-half of the capital value of the land after deducting from such capital value the amount of instalments due at the date of the loan. Advances are made only on the security of a first mortgage, but a second mortgage may be taken as collateral security.

Repayment of loans. — Interest at a rate determined by the Treasurer is payable on all advances made. After five years the borrower must begin to pay off the principal in fifty half-yearly instalments, but the advance may, at the option of the borrower, be repaid at any time sooner than is provided, and in larger instalments.

Statistics. — Table VI contains statistics of advances to farmers in Tasmania.

TABLE VI. — *Loans to Farmers in Tasmania.*

Year	Number of applications approved during year ended 31 March	Total advanced to 31 March	Balance due at 31 March	Annual profits during year ended 31 March	Accumulated profits at 31 March
		£	£	£	£
1909.	94	5,687	5,657	...	...
1910.	61	4,187	8,521	(-98)	(-98)
1911.	71	14,610	13,561	48	(-50)
1912.	52	18,636	16,592	81	31
1913.	96	23,915	21,089	472	503
1914.	159	41,004	36,965	295	798
1915.	(1)	72,252	66,572	712	1,509
1916.	(1)	47,770	87,106	1,278	2,787
1917.	(1)	117,027	103,152	1,238	4,025
1918.	(1)	124,319	105,965	1,224	5,249

(1) Not available.

§ 7. AGGREGATE STATISTICS.

In Table VII we give aggregate statistics for the Commonwealth of Australia of advances to farmers. The imperfections in the previous tables recur in the aggregate figures; the most important are noted. The combined figures for any one year contain figures relating to 30 June in most of the States, but relating to 31 March for South Australia and Tasmania and in some cases to 31 December of the previous year for New South Wales.

TABLE VII. — *Loans to Farmers in the Commonwealth of Australia.*

Years	Number of applications approved during year	Total advanced	Balance due	Annual profit	Accumulated profit
		£	£	£	£
1904	(1)	3,378,233	2,526,892	(4) 12,071	(4) 49,753
1905	2,090	3,715,944	2,628,054	(4) 12,908	(4) 76,609
1906	2,775	4,172,714	2,759,852	(4) 14,772	(4) 87,185
1907	2,633	4,558,516	2,774,026	(4) 15,067	(4) 102,634
1908	3,796	5,173,911	2,987,255	16,511	119,146
1909	5,680	6,138,852	3,531,073	23,382	144,451
1910	4,970	7,067,574	3,921,975	24,602	165,121
1911	(2) 4,112	8,063,072	4,251,930	27,233	191,722
1912	(2) 4,433	9,363,309	4,987,838	30,562	222,284
1913	(-) 6,395	11,233,284	6,433,995	37,365	259,649
1914	(1)	13,605,900	8,244,544	52,307	311,956
1915	(1)	14,984,726	9,135,602	50,404	362,359
1916	(3)	15,966,334	9,617,748	57,961	420,320
1917	(3)	16,723,891	9,961,357	(2) 48,632	(3) 463,029
1918	(3)	17,527,228	10,146,674	(2) 46,779	(3) 513,172

(1) Figures too incomplete to be given. — (2) Exclusive of Queensland. — (3) No figures available. — (4) Exclusive of New South Wales. — (5) Exclusive of profits made in Queensland subsequent to 1916.

In spite of its imperfections, Table VII shows very clearly the great development which has taken place from 1908 onwards. In the years 1913 and 1914 the sums advanced during the year were specially high, but a falling-off is to be noted in the years 1915 to 1918. This, however, is probably attributable to the war.

Part IV: Agricultural Economy in General.

FRANCE.

THE GRAIN AND MEAT SUPPLY DURING THE WAR.

OFFICIAL SOURCES :

CHAMBRE DES DÉPUTÉS, II^e LÉGISLATURE, SESSION ORDINAIRE DE 1919. COMITÉ SPÉCIAL DE RAVITAILLEMENT. RAPPORT DE M. LOUIS MARIN, DÉPUTÉ.

LAWS, DECREES AND MINISTERIAL CIRCULARS ANALYSED IN THE COURSE OF THE PRESENT ARTICLE

§ 1. THE ORGANIZATION OF THE WHEAT SUPPLY.

A. *Agricultural year 1914-1915.* — The problem of the wheat supply of the country arose about the middle of the agricultural year 1914-1915, on account of the necessity of renewing the stock laid in for the provisioning of the entrenched camp of Paris. The price of native wheat began to rise, and the army commissariat department undertook to requisition the needful quantity. These requisitions did not prevent the continuance of the rise, but they called forth protests from the holders of the wheat, who were compelled to sell below the market price. This caused a restriction very disturbing to the local authorities who feared that their districts would be deprived of a commodity which could not possibly be replaced at a normal price.

In the course of this agricultural year the first purchases of foreign wheat and flour, and the freight arrangements for its transport were effected. From this time it was understood that the wheat purchased by the government would be sold at the requisition price of native wheat, that is, at a price inferior to its net cost. This decision was due to the anxiety of the public authorities to keep bread at a normal price.

The first sales, made directly, took place in May 1915. These sales checked the rise, and the market price of wheat became at the end of the agricultural year, nearly the requisition price.

B. *Agricultural year 1915-1916, and the Law of 16 October 1915.* — The

harvest of 1915 being less than the normal, it was necessary on this account to provide for making important purchases in foreign countries, as well as the means of obtaining and apportioning the cereals necessary for provisioning the country. With this view, the Law of 16 October 1915, in order to satisfy the needs of the civil population, entrusted the prefects with powers of requisition under the control of the Ministry of Commerce.

By virtue of the provisions of this law, the requisition price of wheat of a good and merchantable quality was fixed at 30 fr. per quintal, and the flour manufactured might be estimated at a rate of extraction of 74 per cent. .

Instructions were given for the determination of the conditions under which the Law of 16 October might be applied. The prefects or their delegates might by requisitioning, ensure the supply of wheat and flour for the civil population ; this requisitioning was effected under the authority of the Minister of Commerce. This minister was also charged to proceed to the purchase of wheat and flour, and to apportion them according to the needs of consumption. In the exercise of the power of requisition, while taking into account the conditions of the local situation, which the authorities of the prefecture seemed to be in the best position to appreciate, it was recommended that the two results to be attained should be kept in view, viz. to prevent speculation and to keep the price of bread at the normal rate. Requisition should be considered as an extreme proceeding. Military laws and regulations had indeed previously contemplated the resort to purchase in the open market, which is merely a requisition by agreement. Still more should it be so in the case of transactions affecting supplies for the civil population, with regard to which it is necessary to avoid causing uneasiness among the people. It was therefore only when purchases by agreement had not produced results that recourse might be had to requisition.

To be excepted from requisition were :

(1) Foreign wheat supplied by the government, as well as wheat and flour bought for supplying the civil population by communes, departments, or chambers of commerce ;

(2) Wheat intended for autumn and spring sowing ;

(3) Wheat reserved for consumption by the cultivators themselves.

It was further recommended that when wheat is requisitioned, it should only in case of necessity be stored, as this could only be a cause of complications, expense and loss, and possession should be taken of it only as it became required for the supply of mills and bakeries.

The price of 30 francs per 100 kilogrammes was fixed only for requisitioned wheat ; but the attention of the prefects was drawn to the anxiety of the legislator to prevent the prices established in the course of private transactions from going beyond the adequate remuneration of the labour and productive expenses of the farmers. It was also estimated that the eventuality alone of requisition according to legal conditions ought to suffice for preventing prices fixed by private contract from exceeding the price

of requisition ; no one caring to buy at a rate higher than the rates at which the quantities purchased might immediately be requisitioned. However, in cases where it was otherwise recourse should be had to the right of requisition to take possession of supplies which had reached prices considered excessive.

The supervision and control of prefects over operations connected with wheat and flour was to be effected without impediment to the freedom of this trade, other than the exercise of the right of requisition. Departments which were in the habit of supplying themselves with wheat and flour from another department might continue to arrange for their own supply as before. To provide against deficiency, the law also authorised the Minister of Commerce to make allotments of wheat to those departments, communes and chambers of commerce which would undertake to re-sell it to satisfy the needs of local consumption. Lastly, a floating capital of 120 millions of francs was assigned to the Minister to cover the purchase of wheat, both home-grown and foreign, by agreement or by requisition.

The customs duties on wheat and flour, suppressed 1 August 1914, were re-established on the day that the law was promulgated.

With this organization, the State became in fact the sole importer of wheat, and no longer met with the competition of private trade on foreign markets.

From that time the purchase of foreign wheat has never ceased. The general arrivals of wheat in the four ports of Havre, Nantes, Bordeaux and Marseilles reached 675 000 tons between May and December 1915. During the same period 660,000 tons were delivered.

The Law of 16 October 1915 was completed by that of 25 April 1916, which raised the percentage of flour extraction, and forbade the use of wheat as food for cattle, and afterwards by that of the 29 July 1916, which strengthened the powers of the administration in cases of requisition.

The Law of 25 April 1916 by which certain provisions of the Law of the 16 October 1915 were modified, contains two important measures, inspired by the desire to husband the financial resources of the country, and to obtain the fullest return from the national production.

In the first place it was forbidden to produce from the milling of the wheat anything except whole flour and bran ; the prohibition was enforced by penalties. The percentage of extraction was consequently raised from 74 per cent to 77 per cent : the sale of fancy flours of all kinds was absolutely prohibited : with the flour so constituted bread was to be made, the same flour also being used for pastry, and as to this last manufacture measures were to be taken to reduce the quantity employed as far as possible.

In the second place it was forbidden to use wheat flour or bread for any except human food ; breeders were recommended to use feeding cakes for feeding their animals, so much the more because the restrictions imposed

by the national defence made a great part of those coming from oil factories available.

The Law of 29 July 1916 laid down that wheat was not to be purchased from the producer at a price higher than 33 francs per 100 kilogrammes, but provided that this price might be increased by 1fr50 per 100 kilogrammes to meet the cost of transport, carriage to the mill, storage and other expenses.

The percentage of extraction of flour was raised from 77 to 80. This regulation flour was also to be used for pastry.

To determine more accurately the quantities which the administration had to procure abroad to complete the national supply, it was recommended that every measure should be taken which might ensure the greatest possible accuracy in the estimation of the crops.

In the course of 1916 the importation of corn in the four ports of Havre, Nantes, Bordeaux and Marseilles amounted to 1,915,000 tons. For that year the deliveries rose to 1,885,000 tons.

C. *Agricultural year 1916-1917.*—The result of the returns of the stocks of wheat after the harvest of 1916 showed the necessity for new measures to maintain the equilibrium between resources and requirements. In the first place, to make every one understand that economy was a rule imposed in the higher interests of the country, a circular dated 2 February 1917, and published throughout France, requested every citizen to labour by precept and example to prevent waste of wheat, flour and bread; it enjoined on all who possessed any authority to require from their subordinates, on pain of severe penalties, the observance of the law. The sale, the shape, and weight of the loaf were prescribed by a decree of 19 February, 1917, so as to reduce as much as possible the consumption of flour: it was forbidden to make or sell fancy bread or fresh bread. No bread was to be offered for sale till twelve hours after it was baked.

These measures being still insufficient, a Law of 8 April 1917 enacted that wheat flour might be used for making bread of a mixed character, containing from 15 to 30 per cent of its total weight, of rye flour or a mixture of flour made of maize, barley, buckwheat, rice, or beans; the proportion of these in the whole mixture was not to exceed 15 per cent. The law left to the government the power of changing this authorization into an obligation by a decree drawn up on the report of the Ministers of Food Supply and of Agriculture.

A Decree of 8 April 1917 directed that through the whole country a return should be made of wheat barley, rye, maize, buckwheat, soya beans, sorghum, millet, and beans in possession of the cultivators, who were obliged to declare at the mayor's office what quantity of these commodities they held. They were authorised to reserve 100 kilogrammes of wheat or other cereal per head of the members of their families, for their own consumption. The wheat not reserved for home consumption was to be bought in the open market by the administration from the cultivators at 36 fr. per 100 kilogrammes, the Minister of Food Supply paying the millers the difference between the price of wheat as fixed by the Law of 29 July

1916 (33fr. per 100 kilogrammes) and that paid under the new regulations

In every department it was the duty of the prefect to ensure that the Law of 8 April 1917 relative to the substitutes for wheat flour was carried out. The price of bread was fixed by him, taking into account the mixtures of flour which he had been obliged to authorize. In no case might the price of bread exceed the amount of the charges in force, increased by 2 ½ centimes per kilogramme.

A month later, the quantity in hand appearing hardly sufficient to last until the harvest of 1917 and the importations of foreign corn being subject to increasing maritime risks, a Decree of 3 May 1917 forbade the millers to send out of their mills after 10 May or to sell wheat flour containing less than 85 per cent of the wheat ground. The mixtures of flours to be used in substitution for wheat flour, authorized by the decree of 8 April 1917, were to be made with flour according to this new percentage of flour extraction. The millers were also forbidden to deliver flour to any person other than bakers and farmers giving out their wheat to be ground. An exception was made in favour of manufacturers of Italian warehouse articles, and regulation flour. Semolinas were to be manufactured with hard wheat, and biscuit factories were to work only for the requirements of the army, navy, or merchant service, or for the relief of the poor.

Bakers only were authorised to retail wheat flour in quantities not exceeding 125 grammes.

As wheat flour was to be used only for making bread, every tradesman in possession of flour was enjoined, within ten days after the publication of the decree, to hand it over to a baker, or place it at the disposal of the mayor.

At the same time, a circular of 4 May 1917 urged prefects and sub-prefects to maintain close communication with millers and bakers in order, by continued pressure upon them, to reduce the consumption of flour to the quantity below which it would be imprudent to go. They were requested to verify carefully the quantities handed over to the bakers, so as to ascertain whether they corresponded to a real necessity, and to suppress a double distribution where consumers were already supplied, for instance, those who received military rations. They were also expected, in the course of time and by persuasion, to arrive at an official statement of the number of bakers and hotel proprietors.

Lastly, the circulars of 19 July and 7 August 1917, urged those departments which produced potatoes to mix a small proportion of that commodity with wheat flour. As there was a promise of an abundant crop of potatoes it seemed the more expedient to utilise it in the making of bread.

D. *Agricultural year 1917-18.* — As there was a probability of a very deficient harvest in 1917, the government was obliged to take measures for altering the mode of requisition, and of apportioning the grain resources.

The Minister of Food Supply resolved to have recourse to free sale, in order to utilize in each department the whole of its resources, while

taking all necessary precautions to prevent speculation, or any apportioning of cereals not required by the national interest. For this purpose, a decree of 31 July 1917 first exacted from the merchants who were willing to collaborate in the new organization, a promise not to buy any cereals at a price higher than 50 francs per 100 kilogrammes. The distribution was controlled by a specially appointed agent, himself a merchant, but to whom commercial transactions were prohibited.

To co-ordinate all these activities, a Department Grain Office was instituted in each department under the presidency of the prefect; the various offices were to maintain a continual correspondence with the central office in Paris under the presidency of the Minister. This decree was an effort to effect control by those who were themselves interested, and it associated the entire commerce in the work of distribution by the State.

To secure a more efficacious regulation of bread consumption a decree of 3 August 1917 provided for the use of a pass-book showing the consumption. If this measure did not immediately effect an economy it at least gave to the government the means of rationing should the necessities of the food supply require it. Each consumer or household^{er} was obliged to make in the pass-book a declaration of the quantity of bread consumed by him and by those living in his house.

The maximum quantity of bread that might be entered in the pass-book for the consumption of each person was fixed in the following proportion: from 1 to 6 years of age, 300 grammes per day; over 6 years of age, 500 grammes per day. A supplementary ration not exceeding 200 grammes per day might be granted to every one who could declare the extra amount to be indispensable for his support; a second supplementary ration, rising to 200 grammes above the preceding, might be allotted to any person working at an active trade. Special clauses regulated measures relating to the control and use of the pass-book, as well as the consumption of bread by the floating population.

The wheat harvest of 1917 having given inferior results, and the importation from over seas being insufficient to make up the deficiency of the home production it became necessary to take new measures to proportion the consumption to the amount available.

The estimate of resources and requirements, as exact as possible, allowed of calculating at about 325 grammes the daily average ration of bread to each inhabitant. This being so the decree of 30 November 1917 drew up the following rule for the consumption of bread, the requisition of cereals and the manufacture of flour.

For each department a quota of cereals is presented to the Minister of Agriculture and Food Supply by the prefect after having consulted with the Departmental Office. This quota is fixed after taking into account the number of inhabitants, the maximum rate of the daily ration of bread, fixed by ministerial decree, deduction having been made of the quantity of cereals adapted for bread left to the producers for family consumption.

In communes of at least 20,000 inhabitants, if approved by the municipal councils interested and the prefect, an individual bread card might

be granted by ministerial decision, permitting consumers to buy their daily ration of bread. In these communes one or more bread offices were opened to supervise the carrying out of these measures.

In each Departmental Office a permanent Bureau was formed to ensure the apportionment of cereals and flour bought on account of the State, according to instructions received from the Minister of Agriculture and Food Supply. Lastly, at the Ministry of Agriculture and Food Supply, a Consultative Committee on Wheat, Flour, and Bread was appointed, to furnish the Minister with advice on the rate of rationing of bread, on questions relating to the regulation of mills and bakeries, on the price of cereals and flour ceded to the State, and on the price of bread.

Bread was to be made with whole wheat-flour, mixed or not with the authorized substitutes. Its weight and shape were regulated by local custom.

The sale of bread for ordinary consumption, whether in loaves or small portions, was to be made by weight. The sale of fancy or regulation bread and of toast was authorized.

In restaurants and hotels it was forbidden to serve at one meal and to one consumer, (1) more than 100 grammes of bread, if the meal cost more than 4 francs; (2) more than 200 grammes of bread, if the cost of the meal did not exceed that sum.

As to pastry, it was forbidden to make pastry or bi-cuits of wheat-flour, rye, or a mixture of the two, maize barley, buckwheat, oatmeal or rice. Further, the pastry and confectionery shops were to be closed in every department during two consecutive days to be fixed by decree of the prefect. It was also forbidden to consume on the premises, on days of free sale.

Dating from 1 January 1918, the State requisitioned all cereals, whether standing corn or in sheaves, wheat, rye, mixed wheat and rye, barley, maize, buckwheat, sorghum, oats, beans, excepting such quantities as were needed for seed, or for the consumption of families engaged in cultivation, or in the case of cereals other than wheat, for the feeding of animals. In every department, the quantities not to be requisitioned were fixed by decree of the prefect, subject to the approbation of the Minister.

The producer was paid the following prices for cereals per 100 kilogrammes: wheat 50 fr.; barley 42 fr.; maize 42 fr.; rye 42 fr.; buckwheat 42 fr.; mixed wheat and rye 45 fr.; sorghum 35 fr.; beans 45 fr.; oats 42 fr. Wheat must be of a specific weight of 77 kilogrammes per hectolitre, and must not contain more than 2 per cent of impurities or foreign bodies. When these two conditions were not fulfilled the price was reduced at the rate of one-half per cent per kilogramme in the case of short weight, and one-half per cent per unit of impurities or foreign bodies more than the 2 per cent permitted.

Cereals and beans except at harvest-time, were not to be conveyed by road except with a permit granted by the mayor, bearing the names and addresses of the producer and of the person to receive them, also the quantity and description of the commodities. All cereals conveyed by road

without the required permit were considered cereals not declared and were consequently requisitioned and paid for at a reduction of 7 fr. per 100 kilogrammes.

Carriage by rail or water was only authorized on showing the permit for the carriage of corn to the station-master or captain of the vessel.

All mills were placed under the control of the Ministry. They were supplied either by purchases which the millers were authorized to effect on account of the State, or by the quantity allotted to them by the permanent bureau or the central service of supply. The commodities at the disposal of the millers were ceded to them at the following prices per 100 kilogrammes; wheat 43 fr.; maize 43 fr.; mixed wheat and rye 42 fr. 30; barley 38 fr. 60; buckwheat 43 fr. 40; sorghum 27 fr. 50; beans 38 fr. 30. Millers were forbidden to send out of their mills or to sell any product of the grinding of corn except the whole flour, bran, and the waste of cleansing, unfit for grinding.

For making bread the whole flour of the wheat was to be mixed with one or more substitutes for flour authorized by the law of 8 April 1917. The proportion of the mixture was fixed in each department by decree of the prefect. The flour-substitutes were to be extracted at the following rates: 80 per cent for maize, 75 per cent for mixed wheat and rye, 74 per cent for beans, 70 per cent for rye, 65 per cent for barley, 67 per cent for buckwheat, 47 per cent for sorghum.

From 1 January 1918 the price of whole meal, whether mixed or not with substitutes authorized by the law of 8 April 1917, and whatever might be the proportion of the mixture, was fixed at 51 fr. per 100 kilogrammes net. This price was applicable to all flour substitutes. The retail sale of wheat flours and of their substitutes was reserved for bakers who could effect it only in quantities not exceeding 50 grammes per head per week.

On 1 December 1917 the Minister of Agriculture and Food Supply issued a decree establishing the conditions of bread cards. He fixed thus the bread ration to be allotted to each consumer:

(1) Those who worked at trades requiring physical force, and agricultural labourers with small means: men above 16 years of age, 600 grammes; women above 16, 500 grammes.

(2) Those who worked at small trades, with very small means; men above 16, 400 grammes, women above 16, 300 grammes.

(3) Other consumers: 200 grammes.

But these rations could not be maintained at the above rates, the quantity of cereals available being insufficient, owing to the difficulty of transport.

According to the decree of 1 December 1917, the cards were individual, and bore the name of the holder; by order of the Ministry they were addressed to the mayors of the communes interested; the Communal Bread Office drew up the lists of consumers by categories, distributed the cards, checked the lists, and besides the bread cards, gave to the consumers one or more books containing tickets for 100 grammes of bread, in number sufficient to represent the ration allotted for the month.

With regard to the milling trade, the previous régime had fixed a premium on the price of flour payable to the bakers under the following conditions ; the price of flour being established by estimating the price of wheat at 50 francs, the State should pay to the bakers a sum which, the actual cost of the flour being taken into account, would allow of their selling the bread at an average price of 55 centimes per kilogramme.

For this system, very difficult to carry out, that of 28 December 1917 was substituted, according to which the purchases from producers being made on account of the State, the State should re-sell at a price lower than the purchasing price, in the interest of the public food supply. It resulted that the millers were able to sell flour throughout the country at 51 francs per 100 kilogrammes, and that the price of bread for current consumption could be fixed at an average of 55 centimes per kilogramme. The State, undertaking to pay the difference between the price of wheat paid to the producers, and its price when re-sold to the millers, assured bread at a normal rate to the consumers.

If the total production of the mills in any department should exceed the requirements of that department, the permanent bureau was to determine the quantity of cereals corn to which every miller was entitled. The consequent reduction of manufacture should bear on all the mills in proportion to their production. If any department suffered from a deficiency of flour, the permanent bureaux interested should arrange among themselves to utilise the over-production of an adjoining department. The excess of available production should be devoted to the formation of a stock of flour to be sent, by order of the central service, either to a warehouse or to departments insufficiently supplied with flour.

The system of food tickets was established in Paris from 29 January 1918, and from April in the departments. It was not carried out without difficulty. Owing to the deficiency of cereals available for bread making, a ministerial circular of the 21 March 1918 decided on the following rates of rationing.

Children under three years of age: 100 grammes per day ;

Children of thirteen and over, and adults (men or women) of sixty years or less not occupied in work requiring physical strength, or not working at all: 300 grammes per day ;

Adults at work requiring physical strength ; 400 grammes per day ;

Men and women above sixty years of age ; 200 grammes per day.

A daily supplement of 100 grammes might be allotted by the local authorities, to adults engaged in particularly arduous work, including night-work and agricultural labour. A daily supplement of from 100 to 200 grammes might also be allotted by the local authorities to old men occupied with such work.

By a circular of 16 July 1918 it was decided that a supplementary allocation of 100 grammes of bread per day might be granted on presentation of a certificate valid for three months at most, to women enceinte ; to persons attacked by tuberculosis, whatever might be the localisation of the malady, to anaemic persons, and to convalescents. A medical

certificate could in no case raise the total allocation of bread to more than 500 grammes per day, whatever reason might be alleged by an invalid requiring an increase of nourishment.

E. *Agricultural Year 1918-19.* — In spite of numerous differences of detail, the cereal system during this agricultural year differs little from that just described. It need only be pointed out that by a decree of 10 October 1918 the daily rations of the different categories of consumers were after 1 November modified as follows ;

Children under three years of age, 100 grammes per day ; Children aged from three to thirteen, 300 grammes per day ; Consumers from thirteen to seventy years of age, not employed in work requiring physical strength, or not engaged in work of any kind, 300 grammes per day ; Consumers engaged in work requiring physical strength and consumers (upwards of eleven years of age) occupied continually in agricultural labour, 500 grammes per day ; Other consumers and people above seventy years of age, 300 grammes per day.

This system remains still in force.

§ 2 CONSUMPTION OF MEAT.

To economise the nation's property in cattle and to facilitate the re-actualising of the army, the government thought it prudent to restrict the consumption of meat. In fact, the civil population, at least in the towns, was consuming more meat than before the war, and the importation of frozen meat was reduced.

A ministerial circular of 27 January 1917 forbade every establishment open to the public to serve any one person with more than two courses and only one of these might be meat. A decree of 14 April 1917 went further, and forbade the consumption of meat at any meal served after six o'clock p. m. except on Sundays. Besides this, the butchers' shops were to close every day at one o'clock.

This measure was only temporary, and was followed by the prohibition of the sale of meat two days a week, Monday and Tuesday. This prohibition was pronounced by a ministerial circular of 14 May 1917, which extended the restriction to the period between 20 May and 15 October 1917. It was applicable to all establishments open to the public ; for these two days butchers and pork-butchers were to close their shops, and every week the abattoirs were also to be closed. Special clauses and exceptions were made in favour of educational or charitable institutions, as well as of military canteens and invalids. The results obtained as a consequence of these restrictions did not correspond to the economies anticipated ; in June the consumption had diminished only by 3.87 per cent ; in July and August, the consumption had only slightly diminished in comparison with that of the corresponding months of the previous year. Moreover, at the end of the summer, when the cattle returned to their stalls, it seemed that the two meatless days were no longer a necessity. Con-

sequently at the expiration of the period previously determined, the restrictions on the sale of meat ceased; the scarcity of fodder and the condition of the national property in cattle seemed no longer to justify this measure.

In the month of April 1918 the question again presented itself; the reduction of the supply of frozen meat and the difficulties in carrying out the requisitioning of cattle for the supply of the army, as at the same season in the previous year, rendered necessary certain restrictions on the consumption of meat by the civil population.

Accordingly the decree of 26 April 1918 forbade the offering meat for sale, whether fresh, frozen, salted, prepared or preserved, for three days a week, Wednesday, Thursday and Friday. It was also forbidden to display meat in those days in establishments open to the public. These provisions did not apply to horse-meat, the sale of which was permitted in special butchers' shops; nevertheless the consumption of this meat was not permitted on those days in establishments open to the public. Butchers' shops (except those for horse-meat), tripe-shops and pork butchers shops were closed on the days when the sale of meat was forbidden. The public abattoirs were also closed every week from eleven o'clock on Monday night till six a. m. on Friday. The number of head of cattle slaughtered each week in all the abattoirs of any one town was not to exceed the average number of animals of the same kind slaughtered each week in March 1918; decrees of the prefect fixed the maximum number permitted in each town. These restrictions did not apply to the supply for the armies in the field or the troops stationed in the interior, nor yet to the canteens of factories and industrial establishments. For these last, exceptions were submitted to the prefect for authorization. For invalids nursed at home meat could only be purchased by permission of the mayor, granted on the production of a medical certificate.

On the 13 May 1918, a ministerial decree, completing these measures, fixed at 200 grammes the quantity of butchers' meat that every consumer might receive on the Tuesday of each week. This quantity might be given only on his producing a coupon of consumption. In restaurants the meat ration for each meal on Tuesdays was not to exceed 100 grammes.

The institution of meatless days was intended to facilitate the transition between the period when the cattle were housed and that of their being out at grass. The measure was to be abrogated as soon as circumstances permitted without damage to the supply of the armies. The restrictions imposed having produced an economy of 20 per cent in the consumption of meat, a crisis in the cattle trade was averted. Besides, the animals were taken from the grass when a persistent drought prevented their remaining as long as it was hoped; the supply of frozen meat was re-established owing to important consignments; on the other hand, the scarcity of fruit and vegetables prevented their being supplied to compensate for the restrictions on meat. Meatless days were therefore discontinued from 20 July 1918, but certain food restrictions, suspended during the meatless days, were revived in establishments for supplying food. On the 1 October 1918 it became necessary to regulate by decree the sale and con-

sumption of pork. A regulation of this kind was made indispensable by the fluctuation ascertained in the production of pork on account of the scarcity of the commodities required in pig-feeding. It therefore seemed indispensable in order to save the pigs:

(1) to enact that throughout the land there should be a weekly period of three consecutive days without pork, and with limitations in slaughtering and transport:

(2) to forbid the preparation of tinned pork;

(3) to limit the manufacture of salt pork.

Lastly, a decree of 19 October 1918 introduced a new system into the meat market, in order to ensure an efficacious control over prices. The measures passed by the decree may be thus summed up:

(1) Suppression of the sale of cattle by dead-weight and the obligation to fix the price of cattle according to the live weight;

(2) Obligatory production of certificates of the origin and the price of the cattle to be slaughtered.

This was the condition of affairs at the moment of the signing of the armistice, 11 November 1918.

SPAIN.

GOVERNMENT ACTION TO PROMOTE HOME COLONIZATION AND REPOPULATION.

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§ 1. BRIEF HISTORICAL NOTES.

The wars waged by Spain for many centuries, either for defence or for conquest, and the emigration which followed on the discovery of America, led to such a decline in the population of the Iberian peninsula that the first Spanish census, taken in the second half of the sixteenth century, showed barely over 9,000,000 inhabitants. To-day this figure has doubled, but considering its area it is evident that Spain is still too scantily populated; the present density of the population hardly amounts to forty inhabitants per square kilometre. Hence the need of carefully fostering the growth of the population, sure source of wealth, progress, and civilisation. Students of economic science in all ages have noted with anxiety the phenomenon of depopulation in Spain and have sought means apt to limit emigration which is still considerable when compared to the population.

The statistics published by the Direction of the Geographical Institute (the only official ones for Spain) show that from 1882 to 1906 over twenty thousand persons emigrated each year; and in the years 1900 to 1906 more than 250,000 inhabitants left Spain; half this number belonged to the agricultural classes.

The problem is therefore not only an economic, but more especially an agricultural one, and it has always been studied in this dual aspect by the Spanish Government, by the communal authorities, and by private students.

During the period of the "Reconquest" each victory obtained over the Moors left vast areas deserted and uncultivated which had to be defended and repopled. The Kings, to consolidate the possession of the reconquered lands, granted exemptions and privileges to settle, even donating tracts to those who undertook to cultivate them. They well knew that ownership of the land is the tie which attaches men most strongly to their country. Sometimes the owner of an estate tried to promote its settlement by offering houses, lands, the use of pasture lands, and personal rights in exchange for a small payment or certain personal services; these agreements, commonly known as "*carta de población*," were sometimes, but rarely, stipulated by the Communes, as, for instance, by the Commune of Segovia in 1297 and 1317.

The most characteristic instance, however, is that of the settlement of the Alpujarras, which began when, on the expulsion of 400,000 Moors, over 400 villages were left deserted in the Kingdom of Granada. The King's Government, after classifying the lands best suited to the needs of the farmers, offered them as a gift to settlers. Over 12,000 families accepted the offer, and to each, according to the number of its members and their labour capacity, a house, arable land, a vineyard, woodland and pasture land was given. These royal grants were known as "*suertes de población*."

Of course it was not to be expected that these first attempts at land settlement should fully realise the desired results, nor that the measures enacted with that end in view should be perfect in all particulars. Thus,

for instance, the rent fixed by the "*cédulas reales*" of 1571 and 1572, together with the tithes due to the Church, absorbed 20 % of the gross returns, and it is evident that the settlers must have found the burden too heavy.

But as the legislators had at heart the end in view, they sought to find the means best suited for attaining it, and so after a few years the charge for rent was reduced, but all the settlers were made jointly responsible for its payment. The wise provisions which required the settler to live on his farm, which forbade him to alienate the grant, those dealing with the right of inheritance, and others prescribing penalties for settlers who failed to farm their land properly, show that the authors of the scheme were thoroughly acquainted with the problems of agriculture and of land settlement. Unfortunately the legislators did not receive in the enforcement of the law the support they had a right to expect from the government administration, and as a result of this and other and minor causes the desired results were not brought about.

It was, however, in the second half of the eighteenth century, rather than in the earlier periods, that the problem of repopulation was made the subject of special study. Many projects were put forward under Ferdinand VI and during the reign of Charles III. The latter, by a "*cédula*" of 28 February 1767, authorised the immigration into Spain of six thousand German and Flemish settlers to repopulate part of the Sierra Morena.

The regulations for the enforcement of this law, issued in July of the same year, are full of wise provisions, but space will not permit of our stating the leading points. Suffice it to say that this settlement was carried out so rapidly that after one year 1,287 foreign families and 287 Spanish families, 6,625 persons in all, were occupying and cultivating the desert area of the Parrilla.

Almost simultaneously the province of Ciudad Rodrigo was repopled, and orders were given to construct centres of population along the road going from Madrid to the province of Estremadura. Barely ten years later the settlement of Encinas del Príncipe was undertaken, and for this purpose a regulation was enacted containing very sensible and interesting provisions. A similar enactment was made in 1791 to regulate the repopulation of the province of Salamanca.

Unfortunately these more recent measures, partly for the same causes that came into play in the case of the previous efforts, partly as the result of heavier taxation, and partly also owing to the grant of amortization in favour of the Municipalities, failed to achieve their purpose. And thus also the whole of the nineteenth century passed by without a satisfactory solution being found for the problem of repopulation and home colonisation.

Meantime landed property in Spain had undergone great changes (1) ;

(1) For full information on this subject we refer the reader to the article "The Distribution of Rural Property and Closer Settlement in relation to the Agrarian Problem," published in our issues of May and July 1916. This article shows with the help of many documents and statistics the present status of rural property in Spain.

great estates had become the rule, and, as above stated, emigration was increasing to an alarming extent.

§ 2. THE ACT OF 30 AUGUST 1907, AND THE REGULATIONS
OF 23 OCTOBER, 1918.

The synthesis of all the measures enacted in the latter half of last century and in the first years of this one, supplemented by others counseled by modern experience and progress, is to be found in the bill introduced into the Cortes by the Minister of Agriculture, Augusto Gonzales Besaga, and approved by it on 30 August 1907. To afford the reader a clear idea of the action taken by the Spanish Government in the legislative field to settle the serious question of home colonization and repopulation, we will give an outline of this law and illustrate its underlying principles.

It is characteristic of this measure that it was not introduced as final nor as the best that could be devised in the matter of home colonization and repopulation, but was presented as a provisional experiment. By this we do not mean that the law itself was provisional; it was permanent; but the possibility of amendments, transformations, and complementary measures was wisely recognised as the probable result of practical experience. In short, it is a law in process of development; and so that this special character should not escape the attention of the legislator a government body was established not only to attend to enforcing the law but also to study possible improvements and additions which, although comprized in the spirit of the act, were not yet in the letter.

The Government body referred to was the "Central Commission for Home Colonization and Repopulation" which, under article 6 of the above mentioned law, consists of an Ex-Crown Minister, who is the chairman, of two Senators, two Deputies, the Director General of Agriculture, the Director General of Taxation and Revenue, two forestry engineers, two agronomists, and two persons of recognised competence nominated by the Institute of Social Reform.

The duties of this Commission consist in deciding what lands are suited to settlement, in dividing them and assigning them, in drawing up plans for the settlements, studying the needs of cultivation and drainage, and lastly, as already stated, in proposing to the Government improvements to be introduced into the law, in order that they may be placed before the Cortes for its approval.

The main purpose of the Act of 1907, as stated in Art. I, is to "settle families destitute of means of work, or of capital to meet their requirements, to reduce emigration, to people the country-side, and to bring under cultivation uncultivated or insufficiently cultivated lands." This is to be achieved by settling poor labouring families suited to farm work on uncultivated crown lands, and particularly on those which are inalienable, as long as they do not form part of the forest wealth of Spain. In like manner the Communes are authorized to alienate their lands — except that portion

assigned to purposes of public utility — if susceptible of being divided up into small holdings. Grants may only be made to married couples or widowers with children, and in no cases to bachelors.

Such lands are not, however, given in fee simple, but for the first five years the grantee is only the occupier and can be turned out if he fails to fulfil his legal obligations. After this lapse of time he becomes the owner, but has not yet full property rights, as for a period of ten years from the grant the lands are subject to other legal servitudes: they may not be alienated either by sale or by gift or by exchange; they may not be mortgaged except to the Government or the Municipality, and in case of death — and this holds good even after the ten year period — the property rights in the farm may only be transferred to one person.

Settlers who start an agricultural industry in connection with their farm are assigned money awards to encourage them.

These are in brief the main provisions of the law of 1907.

To get a proper understanding of their practical importance the leading points in the regulations for their enforcement must be examined, as these are what really show the great care and activity of the Government in fostering home colonization and the repopulation of Spain.

There are three sets of regulations for the enforcement of the law: the first dates back to 13 December 1907; the second to 13 March 1908; and the last to 23 October 1918.

Obviously the second, published only three months after the first, could not contain amendments of great importance, and indeed, except for an additional and unimportant article, the two sets of regulations are identical. But the third set, published in 1918, clearly shows the lesson taught by more than ten years' experience, and it is this set only which we will examine.

The lands to be assigned to settlers are, more especially, known as inalienable crown lands; in their case the enforcement of the law is compulsory, and the only exception made is in favour of those areas the preservation of which is deemed necessary to the forest wealth of the country or whose area is of less than 30 hectares, as in this case they are inadequate to meet the needs of a settlement.

A law passed on 27 December 1910, amended the Act of 1907: it authorized the subdivision of crown lands which have already been put up for auction by the Ministry of Finance and adjudicated, in those cases when actual possession has not yet been taken on account of failure to make the required payments.

Lands owned by the Communes, or held by them in usufruct, may also be used for settlements. This class of lands however may only be parcelled out into holdings with the consent of the Communal councils. Lands described in the Land Register of the Ministry of Agriculture as set aside for public use may also be assigned to settlers when this is deemed advisable, for special reasons, by the Central Commission.

After the Central Commission has made a preliminary survey of a zone proposed for settlement, it must draw up a concrete plan and submit

it to the Government for approval. As a rule, the holdings must be regular in shape and be of free access ; they must be of such size that the family of a farm labourer can cultivate them normally on the days and during the hours when they are not working for other farms, thus procuring for themselves supplementary earnings over and above their daily wages.

If the settlement is to be on a larger scale, the Commission must also see that the holdings to be assigned to each family are of nearly equal productive capacity, and such that the settler, after obtaining profits representing interest on the capital invested, may obtain from the land the requisite means to support his family. Each settlement must be provided with the necessary farm buildings, and, as a rule, each holding carries with it a home adequate to house the family. The settlement must be equipped with a church or chapel, a school, a house for the teachers, a meeting room, postal and telephonic service, a chemist's shop and a house for the doctor, store houses for the co-operative associations, warehouses, a mill, a bakery, etc.

The buildings must be simple and solid, and as far as possible in the style of the locality.

When all is ready for the settlement, the engineer-director publishes a proclamation inviting applicants. Preference is given to families belonging to the district in which the land to be granted is situated, next to those belonging to the same province, last of all come outsiders. Other things being equal, preference is given to the more numerous families.

When the requisite number of settlers has been secured, lots are drawn to determine the rotation in which the families are to select their holdings. The provisions of the law are supplemented by a very important one contained in the regulations which makes it a *sine qua non* for the maintenance of the grant that the farm be cultivated uninterruptedly, and that if, owing to the death of the grantee, a holding be left uncultivated for a year it is held to be unproductive and action can be taken to recall it.

In order that a settlement be entitled to the privileges granted by law it must be inhabited by not less than twenty families ; only as an exception, and when the land is absolutely unfit to support so many, this number may be reduced, but in no case may the number of families be less than ten.

Article 8 of the Act requires the members of a settlement to form a co-operative association among themselves. This association shall provide the settlement with credit, act as a savings bank, friendly society, insurance, purchase and sale society and promote all those improvements and material and moral advantages which can be obtained by mutual aid and united effort toward a common purpose.

This is one of the wisest provisions of the law and is certainly that which will prove of the greatest benefit to the members of an agricultural settlement. Mindful that the members of a new settlement may not have the requisite ability to manage a co-operative association the law entrusts this duty to the Central Commission.

The formation of these associations, which are also in the nature of agricultural syndicates, takes place immediately after the adjudication

of the holdings, and it is their duty to purchase all that is needful for the settlers and their families, seed, fertilizers, implements, live-stock; prepare and sell the produce of the settlement; organize insurance, credit and thrift; co-operate with other syndicates and co-operative associations, agricultural or other; manage the public services required by the communes; promote lectures, provide for education, and for medical care and assistance in case of illness or accidents; attend to the up-keep and repair of the communal buildings, furniture, etc.; administer and distribute the money awards granted, as aforesaid, under the law.

The capital of these co-operative associations consists mainly of subsidies, grants, and loans made by the Government through the agency of the Central Commission and of other public bodies, but it is also increased by private donations; regular receipts are secured by the dues paid by the settlers in money or in kind, by the personal service contributed by the members at fixed periods, by profits realized on business done and on the sale of the products obtained from the live-stock held in common.

All the settlers, heads of families and owners of a holding, or their widows, are required to be members of the co-operative association, and all must share alike in forming the capital fund, as also in the distribution of the profits which the association makes.

A fuller summary of the regulations of 1918 will be found in the *Annuaire International de Législation Agricole* (VIIth Year, 1918) published by the International Institute of Agriculture (Rome, 1919) on pages 915-927. We refer the reader desirous of fuller particulars to that publication, and will now briefly set forth the results so far obtained by the application of the law and regulations.

§ 3. RESULTS OF THE APPLICATION OF THE ACT.

In illustrating the practical results obtained by the application of the law a better idea will be given by reviewing the more important settlements formed since 1907, rather than by a general statement which, of course, could only be approximately correct.

Ever since its formation the Central Commission set resolutely to work, and in its Report on its first year's labours it was able to point not only to several projects, the study of which was well in hand, but also to a settlement, fairly complete in all its parts, and already being effected on the lands of *La Algaida* in the province of Cadiz. The selection of this locality had been made, first of all, in view of the easy water communications which allowed of cheap carriage for the produce of the settlement, secondly in view of the subterranean waters which allowed of cheap irrigation, and lastly on account of the poverty stricken condition of the workers in that district which induced them to emigrate. Of the 461 hectares assigned to the settlement only 53 remained uncultivated, and 250 were divided up into holdings; 126 hectares were assigned to the co-operative association as a protective zone; 18 were required for roads and buildings, and the re-

mainder was used as a nursery for American vines and as an experimental field.

The total cost of installing the settlers amounted to 1,096,756 pesetas; the value of the lands divided up amounted to 1,350,000 pesetas for those brought under intensive cultivation and 700,000 for those used for vineyards. A loan of 70,000 pesetas was made to the settlers, to be amortized in ten years.

In 1910 the settlement of *El Plans* in the province of Alicante was made and in 1911 that of *Sierra de Salinas*. This latter is deserving of special mention; the settlement covers an area of 2,733 hectares partly in the province of Alicante and partly in that of Murcia where it takes the name of *Coto de Salinas*.

With the exception of some rocky sections unsuited to cultivation, the land may be divided into three zones; one, divided into holdings, is in the plain and the soil is very fertile; another is mostly mountainous and the soil, in which lime predominates, is of average fertility. The third, yet more mountainous, is not really suited to cultivation but is well adapted to reafforestation. These three zones are divided for settlement into 49 lots, with an area varying, according to the quality of the soil, the conditions of cultivation, the exposure, etc. Thus some lots attain a maximum area of 20 hectares while others are of the minimum area of 10 hectares.

The settlers installed themselves there in 1914; but at first the isolation, the lack of industry of some who thought they could live at the expense of the Government, and perhaps other causes made development very slow, more especially so as some of the settlers, engaged on afforestation works, could live on their wages and so thought it unnecessary to exert themselves in cultivating their holdings. Nevertheless a few sensible and active people saved the situation; by word and deed they encouraged the lazy, and in 1918 the settlement had attained full development. Each settler possesses a plantation of 700 olive-trees and a small vineyard, but these latter, so far, do not seem to have given satisfactory results.

As was to be expected, the soul of the settlement of *Sierra de Salinas* was the co-operative association; by the purchase and sale of cereals it realized 3,999,902 pesetas for 111,990 kgs. of grain; 35,800 kgs. of hyperphosphates were sold to the settlers and the profits realised on the purchase and sale of foodstuffs amounted to 3,191.34 pesetas which were equitably distributed among the members. Most of the settlers, taking advantage of the credit facilities afforded them by the co-operative association, have purchased farm animals, carts, implements, etc.

Ten kilometres from the capital is the settlement of *La Alqueira*, covering an area of 467 hectares of plain land; the soil is fairly rich in nitrates and potash but somewhat deficient in sulphuric acid. It is divided up into 55 holdings, of which 22 each of an area of 3 hectares are cultivated as vineyards, and the other 33 each have 6 hectares under cereal crops and 1 hectare under vines.

The harvest returns were 90,170 kgs. in 1917-18, and 183,299 in 1918-19.

The maximum earnings obtained on any one holding were 3,250 pesetas in 1918 and 4,080 in 1919.

Another settlement deserving mention is that of *Mongo* (the Roman Monsagonis) in the north of the province of Alicante. It is 753 metres above the sea-level, and covers an area of from 1,200 to 1,300 hectares. Once this ground was covered by a vast pine-forest which gradually died off, leaving the place in a state of desolation. In May 1908 an engineer of the Central Commission visited this estate and proposed that it be brought under cultivation. The first section, known as *Mongo-Denia*, covers some 650 hectares, from which 235 must be deducted for they consist of a huge mass of rock which caps the mountain.

Forty families have been settled there, cultivating individual holdings as well as a holding held in common. The average income of each settler is 2,070 pesetas; a small sum undoubtedly, but which yet allows the worker to live pretty comfortably, which he could not do if he were dependent on the wages of a day labourer. Moreover, it is to be hoped that when the Government will be able to advance larger sums the conditions of the settlers will be considerably improved.

We cannot pass by in silence another settlement which, although it is yet only a project, deserves special mention on account of its size. We refer to the settlement of *Gandaras de Prado*, in the south of Galicia, very well situated for the Roman road which goes to the Portuguese frontier runs through it as does also the railway which connects Orense with Vigo. It covers an area of 418 hectares. A plan for diversified farming is proposed for this settlement, that is to say each holding of about three hectares will be used not only for raising crops but also for raising livestock on a small scale. Each holding will be provided with four head of cattle, six sheep, three goats, three pigs, and fifty head of poultry. The annual income of each holding is expected to amount to about 2,300 pesetas.

In July 1919 the Central Commission proposed to the Government to make an important settlement in Andalusia, on a tract of 10,000 hectares which can be irrigated from the swamps of the Guadalquivir, and which would be brought under intensive cultivation by no fewer than three or four thousand families. The preparatory works will, of course, be long and costly, but, as a beginning, 2,000 hectares divided up into 650 holdings have already been set aside for settlers. The Commission estimates the cost of putting them into working order at over half a million pesetas, which the Government will loan with the requisite guarantees of repayment within a period of twenty-five years at an interest rate of five per cent. per annum.

*
* *

These few examples clearly show that the Government is devoting careful study to the problem of home colonization in Spain and that it has found the right way of solving it. Undoubtedly much has still to be done, but the activity so far displayed by that important body, the Central

Commission, is a guarantee that new and more effective means will be thought out for the final solution of the difficult problem. The obstacles in the way are serious and many, but they are not insuperable; the works of able and learned students of this question contain practical suggestions; there are examples to encourage the farmer and enable him to overcome the disappointment caused by early failures; proposals have been made which will reduce the heavy expenditure required for organizing a settlement; suggestions are available which should induce the owners of large tracts of uncultivated land to attempt its reclamation, and practical advice of all kinds is forthcoming which should provide the legislator with material for drafting a new Act, radically modifying any antiquated features in the measure passed in 1907.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

FRANCE.

PROFIT SHARING IN AGRICULTURE. — *Comptes rendus des séances de l'Académie d'Agriculture de France, session of 28 April 1920.*

The French Academy of Agriculture having entrusted to two of its sections the task of considering the question of the best course to be taken in order to unite more closely all who were working together for the success of agriculture, from the first rejected the idea of profit-sharing in the exact sense of the words, because on a farm, still more than in a workshop, the figures representing the profits are liable to be contested, especially because in agriculture the profits are in continual danger of being lost through external factors, such as atmospheric conditions. Hence serious disappointments may await the profit-sharers and perhaps an element of discouragement instead of a stimulant.

The Academy has therefore unanimously recommended less ambitious solutions on the following principles:

To the labourers fixed wages should be guaranteed at the normal rate of wages in the district, and they should be given an interest on the one hand in the increase of production, both vegetable and animal, and on the other hand in the diminution of expenses, both with regard to the cost of materials, and that of labour.

To give the labourers an interest in the increase of vegetable or animal

production, they should receive a premium calculated, not on the sale price, but on the quantity produced, so much per quintal of corn, or oats, so much per hectolitre of wine made, or in the case of animal produce, so much for every animal raised or fattened, so much per kilogramme of butter produced, etc. How to give the labourers an interest in the diminution of expenses is a more difficult question. But its solution is not impossible, and with a little ingenuity a system may be invented and worked by which premiums or gratifications will be given for avoiding the necessity of repairs to harness, tools and machines, if the employees succeed in keeping the expenses of the employer below a certain fixed sum.

In short, the Academy considers that the best method of giving the labourer an interest in agricultural improvement, is to ensure to him the rate of wages normal in the district, and to give him in addition, premiums on production and economies, the head of the undertaking being, in all circumstances, the undisputed master of the direction of the works.

LITHUANIA.

PROPOSED AGRARIAN REFORM. — *The Board of Trade Journal*, N° 1211. London, 12 February 1920.

Before the war the Russian Government owned an average of 10 per cent. of the landed estates of Lithuania; the rest was divided among persons of Russian origin at various times. A portion of these estates were granted with special privileges to Russian statesmen. These were known as "majorat" and "fideikommiss." The proprietor of a majorat estate had no right to sell or mortgage it and if he had no lawful successor the estate reverted to the Government. The owner of a fideikommiss could dispose of his estate only to members of the family. Some estates were also granted to Russians in fee simple.

In all, about 36 per cent. of the total land area belonged to private land-owners and big proprietors, possessing not less than 2,000 hectares. Of the remainder, 60 per cent. represented farms of not over 100 desiatins; 18.4 per cent. farms from 100 to 1,000 desiatins; and 21.6 per cent. farms over that area.

Among those engaged in farming, 98.4 per cent. were smallholders of not more than 100 desiatins; 1.5 per cent. were holders of from 100 to 1,000 desiatins; and 0.1 per cent. big holders of 1,000 desiatins and over. Of small farms not exceeding three desiatins there were about 110,000 representing 28 per cent. of the farming population. Half-a-million persons, or about 15 to 20 per cent. of the agricultural population, were landless.

The fundamental principles of the proposed land reforms are as follows: From all Government-owned land, majorats, estates in gift and expropriated lands which exceed the maximum norm to be permitted there is being formed a special land fund or reserve. The proposed maximum norm is 200 to

300 desiatins. The balance will be divided among the small farmer class and those without land, in the first place to veteran soldiers, in fee simple, if desired, or leased in the proportion of 6 to 20 hectares per family. If close to a town the grant will be considerably less. This land is to be transferred for cash down or on very easy terms of payment; 90 per cent. of the value to be paid in instalments spread over 45 years. For expropriated land, the Government will make payments extending over 66 years. The first land to be expropriated will be estates ruined during the war, or the cultivation of which is below the average.

PORTUGAL.

BILL FOR GRANTING LAND TO DISCHARGED SOLDIERS. — *Diário de notícias*, Lisbon, 4 April 1920.

The Portuguese government has recently presented to Parliament a bill for the expropriation of uncultivated lands, whether private property or belonging to public administrations, in order to constitute small agricultural colonies of from five to twenty hectares in extent, to be managed by discharged soldiers (*Casais Agrícolas dos Soldados da Grande Guerra*).

The order in which the plots are to be distributed will be determined by the military claims of the candidates (mutilated, decorated for bravery, decorated with the military cross). The government opening the necessary credit to the colonists, and authorizing them to avail themselves of all the provisions of the law as regards co-operation requires from them a reasonable price for each plot. These plots will be exempt from all taxes for 25 years, the period necessary for continued possession to be transformed into right of property, but the holders will be under an obligation to pay an annual sum commensurate with the extent of the plot.

It is understood that within the prescribed period the plot shall neither be alienated nor burdened with any obligation or mortgage bond except such as may be for the advantage of the State, and consequent on agricultural credit transactions to which it has given consent.

It is hoped that with the passing of this bill and the application of the law a large extent of uncultivated land will in a short time produce food sufficient to make Portugal independent of foreign supplies; in any case it is certain that these provisions will put the food problem on the way to a definite solution.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45. $\frac{5}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $\frac{83}{64}$ d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	{ 0.21998 0.0275	{ gallons bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	28. $\frac{261}{64}$ d.	at par
1 Milreis, gold (Portugal)	=	45. $\frac{519}{64}$ d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.05/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 $\frac{3}{8}$ d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$ - of £1 (gold)	
1 Talari (20 piastre) (Egypt)	=	45.1 $\frac{1}{32}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64 d.	at par
1 Zentner (Germany)	=	117.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

FINLAND.

THE PRESENT POSITION OF CO-OPERATION (*Continuation*) (1).

§ 3. LOCAL CO-OPERATIVE SOCIETIES.

We will now explain rapidly the position of local co-operative societies according to the latest available data, adding some comparison with previous years, so as to throw light on their progressive development. It will be seen that notwithstanding the inevitable reaction after the war, and the state of internal disorder manifested in a later period, yet as a whole the co-operative movement in Finland continues to grow with happy results. We limit the present study to three of the principal forms of co-operation: co-operative dairies, co-operative credit banks, and co-operative distributive societies.

A. *Co-operative Dairies.*

During the war there was a considerable numerical development of co-operative dairies, rising from 410 at the end of 1913 to 494 at the end of 1918.

Unfortunately the statistics elaborated by the "Pellervo" as to the composition, working and results of these societies are incomplete, refer-

1) For the first part of this article see our issue of May 1920.

ring to a different number of societies in different years, and comparison of one period with another is accordingly imperfect and sometimes impossible.

Of the 494 dairies in existence at the end of 1918, 328 had sent in the number of their members, a total of 41,584. Thus in that year the average number of members per dairy was 127. Only 5 societies had more than 500 members (the most numerous was the "Iisalmen Osuusmeijerei" in the district of Kuopio, with 882 members), 52 had from 200 to 500 members, 96 from 100 to 200, 82 from 50 to 100, 75 from 20 to 50, and 18 fewer than 20 (the smallest was the "Bastö andelsmeijerei" in the district of Abo, with 11 members).

For 399 societies the value of the shares was known for 1918. It was usually 20 marks, but rose in some dairies to a maximum of 40 marks, and in others fell to a minimum of one mark per head; the members are generally expected to pay besides a supplementary contribution which usually amounts to one and a half of the share. As to liability, out of 396 societies which gave information on the subject, 122 had adopted the system of unlimited liability, 155 that of liability limited to an amount varying from a minimum of 5 to a maximum of 100 marks; in 119 the members were not liable.

The total number of cows possessed by members of 328 co-operative dairies was 264,698, with an average of 6.4 per member; for 317 dairies the members who possessed fewer than 4 cows were 15,159, those who had from 4 to 15 were 20,516, those who had more than 15 were 2,971.

In the greater number of cases the dairies receive milk from the farmers who belong to them, but—especially in the east and northeast where the population is very sparse—there are societies which receive instead cream obtained by means of separators which the peasants have in their homes, and lastly, there are societies which receive both milk and cream; of 371 societies which furnished particulars on this subject, in 1918, 248 belonged to the first category, 88 to the second, and 35 to the third. We hear of 195 dairies which receive produce also from non-members, while 111 have declared that they are supplied only by their own members. The total quantity of milk sent in to 307 dairies in 1918 was 160,965,583 kilos. with a daily average per society of 2,229 kilos., and an average per cow of 703 kilos. per annum. As to machinery in their possession 363 societies out of 406 declared that they possessed separators, and 36 had refrigerators: seven devoted themselves exclusively to making cheese. As to the form of power employed, 276 out of these 406 dairies used steam, 5 used electricity, 7 used both steam and electricity, 9 used water power, 2 used steam and water power, 48 used animal traction, 52 used manual labour, and 7 used animal traction and manual labour together. In about 75 per cent. of the societies the milk was pasteurised (in 1918 this was the case in 258 dairies out of 345 which furnished particulars on this subject). Out of 160,965,383 kilos. of milk received by 307 dairies in 1918, 130,643,654 were utilized for butter making, 5,579,279 for cheese making, 369,684 for payments in kind, and 24,381,766 were sold.

The quantity of butter manufactured was 658,005 kilos., of cheese 395,366 kilos.

Several societies do other business besides dairying. Thus in 1918, 39 societies stated that in addition they carried on the business of milling, 18 the breeding of pigs, 4 agriculture, 3 working in wood, 2 collective purchases, 1 glass making, etc.

The total balance sheet of 287 societies showed in 1918 the following situation :

<i>Assets.</i>		<i>Liabilities.</i>	
	Marks		Marks
In hand	1,371,712	Loan capital :	
Deposits, credits, shares etc. .	7,464,853	Government loans	477,583
Buildings and fixtures.	5,548,545	Loans from banks etc.	5,745,539
Minor assets	687,439	Owncd capital :	
Produce in stock, etc.	4,359,547	Share capital	3,734,909
Supplementary payments	103,586	Supplementary payments . . .	2,035,433
		Reserve fund	1,468,006
		Working fund	1,708,122
		Excess of assets	4,366,070
Total	19,535,682	Total	19,535,682

TABLE V. — *Aggregate Balance Sheets of Co-operative Dairies from 1905 to 1918.*

(in thousands of marks).

Assets					Liabilities					
	Build- ings and fixtures	Various	Supple- mentary pay- ments	Total	Loans granted by the State	Other loans	Owncd capital	Total	Excess of assets	
1918	7,465	5,549	6,418	104	19,536	478	5,746	8,946	15,170	4,366
1917	5,290	5,182	5,481	36	15,989	466	5,109	7,216	12,811	3,178
1916	5,198	6,103	3,352	47	14,700	813	3,757	7,616	12,186	2,514
1915	4,173	6,132	2,262	61	12,628	1,144	2,406	6,713	10,263	2,365
1914	2,812	6,548	1,597	73	11,330	1,353	2,735	6,227	10,315	1,015
1913	2,290	6,550	1,316	84	10,240	1,466	2,305	5,571	9,344	896
1912	2,266	6,668	1,136	80	10,150	1,677	2,298	5,203	9,178	972
1911	1,858	7,262	1,076	159	10,355	2,006	2,744	4,750	9,500	855
1910	1,300	7,083	934	218	9,535	2,179	2,830	3,915	8,924	611
1909	1,082	7,287	967	282	9,618	2,584	3,259	3,320	9,163	455
1908	937	6,936	840	225	8,938	2,619	3,132	2,672	8,423	515
1907	632	6,022	602	194	7,450	2,086	3,111	1,914	7,111	339
1906	434	4,219	366	83	5,102	1,343	2,332	1,192	4,867	235
1905	286	2,715	326	34	3,361	752	1,662	729	3,143	218

The owned capital represents an average of 59 per cent of the total capital at the disposal of the co-operative dairies; of the 287 societies of which we possess data, 66 provide for their own requirements exclusively out of their own means, while for 156 the loan capital represented less than 50 per cent, and for 65 above 50 per cent. The dairies which have recourse to State credit are 33, for sums varying from 1,250 to 40,000 marks.

We reproduce in the Table V (page 457) the position from 1905 to 1918 of certain items of assets and liabilities, pointing out however that the data are not exactly comparable, as they refer from year to year to a different number of societies.

The account of receipts and expenditure was in 1918, also for 287 dairies, as follows:

<i>Credit.</i>	Marks	<i>Debit.</i>	Marks
Available surplus brought forward from 1917	112,727	Deficit brought forward from 1917	49,018
From sales	113,203,117	Sums paid for milk, cream, etc.	100,051,981
Various receipts, (work done gratis, profits of accessory industries, interest, etc)	1,672,191	Working expenses	8,180,208
Supplementary payments	116,080	Other expenses	907,845
		Carried forward	2,139,593
		Excess of receipts over expenditure	4,366,270
Total	115,694,715	Total	115,694,715

TABLE VI. — *Receipts and Payments of Co-operative Dairies from 1905 to 1908.*
(in thousands of marks).

	Receipts		Expenditure			
	Totals	Including receipts accruing from sales	Totals	Including		
				Sums paid for milk, cream, etc.	Expenses	Bonus
1918	115,695	113,203	111,329	100,052	8,180	2,140
1917	79,156	77,594	75,978	67,319	6,526	2,176
1916	61,958	60,500	59,445	51,490	6,012	1,911
1915	47,707	46,750	45,342	39,209	4,763	1,307
1914	38,567	36,319	37,557	31,224	4,425	1,001
1913	36,515	34,303	35,619	29,762	4,022	993
1912	34,073	31,801	33,101	27,645	3,614	1,033
1911	32,418	30,200	31,563	26,296	3,565	951
1910	27,004	25,163	26,393	21,761	3,234	785
1909	24,343	22,739	23,887	19,559	3,201	640
1908	22,965	21,630	22,501	18,606	3,012	572
1907	17,468	16,470	17,130	14,110	2,366	432
1906	13,906	12,853	13,671	11,566	1,663	300
1905	11,437	10,535	11,219	9,622	1,357	209

The dairies which closed the year with a loss, and were obliged to recur to supplementary payments were 23, against 264 which had an excess of receipts over expenditure.

In Table VI (page 458) we sum up the total financial results of the co-operative dairies from 1905 to 1918, making the usual reservation about comparing the data.

B. Co-operative Credit Societies.

The co-operative credit societies also increased in number during the period of the war: while in 1913 there were 476, at the end of 1918 there were 708. Thus in five years there was an increase of nearly 50 per cent.

The facts given here refer only to the credit societies financed by the Central Credit Institute. They are all agricultural in character, and in 1918 they numbered 606, with 28,854 members, or an average of 47 members in each. Only 41 societies numbered more than 100 members (the largest is the "Vesannon" in the district of Kuopio with 237 members); 175 had from 50 to 100, and 390 less than 50 with a minimum of 9 (for the "Lopenkulman" in the district of Abo).

TABLE VII. — *Number, Amount and Duration of Loans granted by Local Credit Societies.*

Years	Number of loans	Total amount of loans	Average amount per loan	Number of loans granted or the duration of			Percentage of various categories of loans		
				Year or less	more than 1 year and less than 3	more than 3 years	Loans for 1 year or less	Loans for more than 1 year but less 3 years	Loans for more than 3 years
		1000 marks	marks						
1918	10,122	5,569	550	2,138	4,757	3,227	21.12	47.00	31.88
1917	11,809	4,583	388	2,669	5,674	3,460	22.60	48.05	29.35
1916	20,375	4,743	233	4,415	10,236	5,724	21.67	50.24	28.09
1915	27,464	4,132	150	6,189	15,381	5,894	22.53	56.01	21.46
1914	22,877	3,635	159	4,147	13,597	5,133	18.13	59.43	22.44
1913	19,892	3,269	164	3,903	11,958	4,031	19.62	60.12	20.26
1912	18,280	2,777	152	4,247	10,735	3,298	23.23	58.73	18.04
1911	18,104	2,491	138	5,028	10,256	2,820	27.77	56.65	15.58
1910	15,589	2,138	137	3,625	9,124	2,840	23.25	58.53	18.22
1909	13,831	2,201	159	3,499	7,665	2,667	25.30	55.42	19.28
1908	11,777	2,181	185	2,931	6,272	2,574	24.89	53.26	21.85
1907	7,497	1,240	165	2,028	3,864	1,605	27.05	51.54	21.41
1906	4,700	667	142	1,608	2,471	621	34.21	52.58	13.21
1905	4,147	564	136	1,708	1,857	582	41.19	44.78	14.03
1904	1,663	277	167	643	787	233	38.67	47.32	14.01

The value of the share varies from 10 to 100 marks; in the greater number of cases it is either 60 or 100 marks. The owned capital of the banks on 31 December 1918 comprized 1,068,096 marks of share capital, and 624,403 marks of reserve fund etc., in all 1,692,499 marks. The loan capital was 5,962,740 marks, lent by the Central Credit Institute, and deposits amounting to 5,649,682 marks.

The number and amount of the loans granted by local credit societies and the duration of the loans are shown in Table VII (page 459) in which we give the data from 1904 to 1915, pointing out that these data are somewhat incomplete.

As will be seen the amount of the loans which from 1904 to 1915 was always about 150 marks has increased considerably during the last three years. And it is worth noting that more recently the number of loans for a period exceeding three years has proportionately increased.

The information given in the next table respecting the objects for which the loans were obtained is of special interest :

TABLE VIII. — *Objects of Loans from Local Credit Societies.*

Year.	Number of loans granted for				
	Improve- ment of land	Purchase of agricultural implements, etc.	Purchase of cattle	Building	Other objects
1918	4,261	1,504	1,397	1,677	2,063
1917	4,796	1,834	1,847	2,177	2,184
1916	4,194	3,624	3,501	2,914	3,067
1915	12,833	6,091	3,663	4,621	3,680
1914	10,973	4,581	2,595	5,133	2,596
1913	8,151	3,910	3,240	4,693	2,241
1912	7,170	4,447	2,808	4,119	1,711
1911	7,491	4,989	2,212	3,549	1,334
1910	6,421	2,944	1,978	2,856	1,390
1909	6,309	2,642	1,694	2,704	1,299
1908	4,847	2,246	1,724	2,135	1,498
1907	3,309	1,661	1,136	1,276	465
1906	1,958	1,132	785	791	253
1905	1,628	996	649	479	408
1904	783	430	261	173	102

Lastly in Table IX we give a summary of the aggregate balance sheet of all the local co-operative credit societies financed by the Central Credit Institute.

TABLE IX. — *Aggregate Balance Sheet of Local Credit Societies.*

(In thousands of marks)

Years p to 31 De- cember	A-set-				Liabilities					Balance of assets over liabili- ties	
	Cash	Credits	Shares in the Central Institutes	Furni- ture etc	Total	Share Capital	Reserve Funds	Loans due to Central Institute etc	Depo- sits		Total
1918	773	10,561	2,083		13,417	1,068	624	5,963	5,650	13,305	112
1917	596	9,289	400	61	10,355	903	503	5,371	3,390	10,227	128
1916	439	7,727	320	57	8,549	852	429	6,120	1,063	8,464	85
1915	298	7,001	273	54	7,628	733	359	6,099	365	7,556	72
1914	207	6,184	216	53	6,660	638	307	5,474	186	6,605	55
1913	200	5,419	163	56	5,838	562	262	4,804	167	5,795	43
1912	214	4,586	100	56	5,066	495	219	4,163	144	5,021	45
1911	204	4,363	95	47	4,709	429	150	3,952	107	4,663	41
1910	196	4,197	88	45	4,526	352	139	3,923	77	4,401	35
1909	205	3,864	79	40	4,188	269	100	3,724	60	4,153	35
1908	126	3,010	63	10	3,209	184	58	2,881	52	3,175	34
1907	83	1,786	40	6	1,915	119	30	1,703	44	1,896	19
1906	61	1,069	23	1	1,054	71	13	937	21	1,042	12
1905	39	648	17	1	705	43	6	643	11	703	2
1904	16	273	7	1	297	15	2	273	7	297	—

There has been a remarkable increase in the share capital which in the last five years has almost doubled, in the deposits which from 1913 to 1918 have increased by 130 per cent., and in the reserve funds, etc., which have increased by 140 per cent. in the same time. Lastly, it should be stated that not all the societies have closed their accounts with a profit: in 1916, 92 banks (out of 572) closed with a total loss of 5,251 marks; in 1917, 81 (out of 599) with a total loss of 4,713 marks, and in 1918, 99 (out of 606) with a total loss of 7,172 marks.

C. Co-operative Distributive Societies.

Co-operative distributive societies have also developed considerably during the war, increasing from 512 in 1913 to 689 at the end of 1918.

The number of members was known for only 549 societies on 31 December 1918. There were 234,526, making an average of 427 members per society: 33 numbered more than 1000 (the most numerous is the "Eilanto" of Helsingfors with 18,758 members), 58 have less than 100.

The amount of the shares is in the greater number of cases either 10 or 20 marks, but it falls in some societies to a minimum of 4 marks, and rises in others to a maximum of 100 marks; the average for 581 societies

is 15.81 marks. Thirteen societies have adopted the system of unlimited liability of the members; in 634 societies the members have a supplementary limited liability, in a proportion varying from 5 to 2000 marks (average for 581 societies, 79.48 marks); lastly in 42 societies there is no supplementary liability of the members.

On 31 December 1918 the owned capital of 497 societies was 26,041,979 marks divided as follows:

	Marks
Share capital	4,005,298
Reserve funds	12,720,034
Other funds	9,316,647

In 1918 for 551 societies, the sales effected amounted to 360,871,561 marks; the purchases made from the Union of Co-operative Distributive Societies to 85,357,712 marks (for 585 societies). The expenses were 23,673,791 marks, representing 5.7 per cent. of the receipts; the net profit was 18,051,694 marks, equal to 4.4 per cent. of the receipts. Only 22 societies closed their accounts with a loss.

To show more clearly the development of this form of co-operative society we think it expedient to sum up in the following table some characteristic features of their work for a series of years, pointing out that the figures of the different columns cannot exactly be compared with one another, as they refer to a different number of societies.

TABLE X. — *Summary of Data Respecting the Work of Co-operative Distributive Societies.*

(in thousands of marks)

Years	Owned capital	Amount of sales	Expenses	Total assets	Total liabilities	Surplus of assets over liabilities
1918	26,042	460,872	23,617	126,299	107,971	18,328
1917	18,356	340,248	16,753	106,823	90,192	16,631
1916	11,078	162,648	8,105	60,741	52,558	8,183
1915	8,136	89,158	5,040	33,011	29,407	3,604
1914	6,840	65,250	4,215	25,952	23,718	2,234
1913	5,397	56,248	2,815	23,995	22,189	1,806
1912	4,695	53,401	2,513	22,444	20,779	1,665
1911	3,910	47,508	2,225	19,824	18,292	1,532
1910	3,381	43,589	2,070	18,159	17,031	1,128
1905	540	10,811	393	3,952	3,631	321

§ 4. THE CENTRAL INSTITUTIONS.

The local co-operative societies of which we have hitherto spoken are federated in provincial organisations or central national institutions. The first, not economic in character, are intended chiefly to study in detail the numerous technical questions which interest the societies affiliated to them, and to complete in some way the more general work of the "Pellervo", in the sense of unifying, directing and controlling the action of the local societies. The central institutions are economic organizations formed with the object of facilitating the operations and transactions of the local co-operative societies, besides carrying on a commercial activity of their own. The central economic institutions working for agricultural co-operation of which we have particulars, are five in number. Their names are :

(1) The Central Co-operative Society for the Exportation of Butter "Valio" (*Andelsmöreexportaffären Valio m. b. t.*), founded in 1903.

(2) The Central Credit Institute of Rural Co-operative Banks (*Andelskassornas Centralkreditanstalt A. B.*), founded in 1903.

(3) The Union of Co-operative Distributive Societies (*Centrallaget för landelsslagen i Finland m. b. t.*), founded in 1904.

(4) The Central Co-operative Society for the Purchase of Agricultural Requisites "Hankija" (*Centralandelsaffären Hankkija m. b. t.*).

(5) The Central Co-operative Society for the Purchase of Agricultural Requisites "Labor" (*Centralandelslaget Labor m. b. t.*).

Of each of these we will give a short account.

A. The Central Co-operative Society for the Exportation of Butter "Valio".

The principal task of this central society is to arrange for the sale of the butter brought in by the societies affiliated it. Before the war, the greater part was exported ; in 1913, 93.7 per cent. was sent abroad (68.1 per cent to England, 21.7 per cent to Germany, and 3.9 per cent to Russia). With the war the home market took a more important part in the disposal of the butter, so that the quantity sold in the country rose to 6.3 per cent. in 1913, 10.6 per cent. in 1914, 21.8 per cent. in 1915, 64.4 per cent. in 1916 and 75.5 per cent. in 1917. This was the consequence either of the diminished total production, or of the restrictions placed on exports. In 1918 there was a serious falling off in production because of the civil war, and the butter trade was placed under the control of the Ministry of Food Supply.

The following table shows the quantities of butter that passed through the "Valio", and the sums paid by it to the affiliated dairies for a series of years.

TABLE XI. — *Quantities and Price of Butter Sold through the "Valio".*

Years	Dairies affiliated to the "Valio"	Butter received — (quintals)	Sums paid — (In thousands of marks)	Average price per quintal — (marks)
1918	264	28,942	43,259	1,494.65
1917	278	60,012	37,176	619.47
1916	269	79,892	32,779	410.29
1915	251	81,506	30,722	376.92
1914	232	76,358	20,647	270.40
1913	201	70,986	19,586	275.93
1912	172	56,031	16,142	288.10
1911	150	53,210	14,613	274.45
1910	157	47,937	12,750	265.97
1909	150	44,590	11,535	258.68
1908	146	42,820	11,474	267.96
1907	141	44,110	10,804	244.93
1906	80	28,788	7,250	251.82

Besides butter the "Valio" arranged for the sale of cheese, eggs, whole milk, sterilized milk, cream, sour milk, etc. In the last three years the quantities of these products sold were as follow:

	1918	1917	1916
Cheese, kg.	245,279	453,428	292,193
Eggs	235,810	538,063	1,416,009
Unskimmed milk, litres . .	5,507,350	7,782,899 (1)	840,639
Sterilized milk, litres . . .	602,969	—	—
Cream, litres	339,960	482,022 (1)	164,252
Sour milk, etc., litres . . .	826,322	516,795 (1)	89,217

The total sales amounted to 64,550,220 marks in 1918 against 50,000,000 in 1917 and 39,774,279 in 1916.

The net profit was 1,030,579 marks in 1918 against 839,626 in 1917, and 511,289 in 1916.

The owned capital of the Society rose from 1,508,256 marks in 1916 to 2,177,445 in 1917, and to 2,612,299 in 1918. On 31 December 1918 stood thus:

Share capital	88,700
Guarantee fund	443,500
Reserve fund	539,145
Other funds.	1,325,848
Profit and loss account. . . .	214,106
Total	2,612,299

B. Central Credit Institute of Rural Co-operative Banks

The nature, objects and working of this institution were fully described in our issue of February 1915.

We shall therefore now confine ourselves to giving a summary in the following tables of some of the chief data as to its development up to the end of December 1918, and the amount of the loan transactions effected by it.

TABLE XII.—*Statistics of the Co-operative Credit Societies Financed by the Central Institute.*

Years	Number of banks financed	Number of their members	Annual income of members according to the register of taxes		Estimated property of the members	
			Total in	Average per member in marks	Total in marks	Average per member in marks
1918.	606	28,853	37,144,080	1,287	373,462,895	12,944
1917.	599	28,372	30,198,802	1,064	307,437,015	10,836
1916.	572	27,127	24,390,178	899	210,960,469	7,777
1915.	508	24,128	20,305,803	842	172,165,675	7,148
1914.	441	21,422	18,366,120	857	145,043,335	6,771
1913.	416	19,755	16,630,987	842	128,922,755	6,526
1912.	399	18,567	15,203,731	819	110,687,678	5,962
1911.	398	16,692	14,037,702	841	95,442,201	5,718
1910.	374	15,262	12,576,162	824	83,790,804	5,490
1909.	340	13,460	11,204,495	832	71,239,644	5,293
1908.	268	10,184	9,455,041	928	52,779,680	5,183
1907.	210	7,027	6,463,098	920	35,942,370	5,115
1906.	148	4,284	4,257,028	994	23,885,040	5,575
1905.	119	3,085	3,275,056	1,062	18,703,785	6,063
1904.	64	1,567	1,930,352	1,232	11,861,195	7,569
1903.	10	241	332,010	1,378	1,918,250	7,960

TABLE XIII. - Amount of Credit granted by the Central Institute to the Local Credit Societies.
(in thousands of marks)

Years	Credits applied for	Credits opened				Credits utilized			
		Total	Average per society	Average per member	Percentage of annual income of members	Percentage of property of members	Total	Average per society	Average per member
1918	20,742,542	13,918,045	22,967	482	37.5	3.7	5,856,661	9,664	203
1917	17,900,802	11,826,965	19,745	417	39.2	3.8	5,429,029	8,897	188
1916	15,248,987	9,629,790	16,835	355	39.5	4.6	6,040,072	10,560	223
1915	12,131,750	7,507,200	14,778	311	37.6	4.1	5,984,264	11,778	248
1914	15,167,300	6,319,900	14,331	295	34.4	4.1	5,341,618	12,113	249
1913	8,783,600	5,552,600	13,348	281	33.4	4.3	4,710,593	11,324	238
1912	7,712,700	4,990,100	12,507	260	32.8	4.5	4,113,103	10,309	222
1911	7,134,300	4,738,600	11,906	284	31.8	5.0	3,931,832	9,879	236
1910	6,524,830	4,388,000	11,733	288	34.1	5.2	3,867,089	10,340	253
1909	5,490,380	4,000,650	11,767	297	35.7	5.6	3,662,519	10,772	272
1908	3,688,830	3,257,650	12,155	320	34.5	6.2	2,878,086	10,739	283
1907	2,302,550	2,068,050	9,848	294	31.4	5.8	1,795,968	8,124	243
1906	1,384,050	1,225,350	8,279	286	28.8	5.1	948,501	6,652	230
1905	1,015,300	833,750	7,006	270	25.5	4.5	622,663	5,232	202
1904	629,800	428,700	6,213	274	22.2	3.6	264,083	3,827	169
1903	114,000	79,000	7,900	328	23.8	4.1	41,950	4,195	174

C. The Union of Co-operative Distributive Societies.

This union had on 31 December 1918, 494 societies affiliated to it. The total amount of the sales effected by it in the course of the year was 107,715,834 marks. Salaries and expenses amounted to 3,357,231 marks. The net profit for the year was 3,615,574 marks, of which 75 per cent. was carried to the reserve fund.

The funds of the Union have more than doubled in the last three years as may be seen in the following table :

	1916 marks	1917 marks	1918 marks
<i>Funds in cash.</i>			
Reserve fund.	4,200,000	7,200,000	10,000,000
Paid up share capital. . .	338,050	294,600	429,125
Other funds	98,000	98,000	97,400
<i>Credit.</i>			
Uncalled share capital . .	67,750	81,400	54,975
Guarantee fund (supplementary liability of the members)	1,217,400	1,128,000	1,452,300
Total	5,921,200	8,802,000	12,033,800

In the following table we give a summary of the statistics relating to the development of the Union from 1905 to 1918.

TABLE XIV. — *Development of the Union of Co-operative Distributive Societies from 1905 to 1918.*

Years	Number of members	Number of shares	Amount of sales (in marks)
1918	494	4,841	107,715,834
1917	442	3,760	91,121,357
1916	432	4,058	72,160,139
1915	341	3,147	35,098,522
1914	244	2,562	24,285,756
1913	196	1,794	22,967,743
1912	168	1,599	19,523,147
1911	148	1,440	16,141,722
1910	139	1,302	13,610,079
1909	131	1,274	14,071,772
1908	115	1,140	14,254,071
1907	80	747	8,884,858
1906	57	547	4,036,594
1905	27	281	1,004,025

D. The Central Co-operative Society for the Purchase of Agricultural Requisites "Hankkija".

The number of members of the "Hankkija" on 31 December 1918 was 1,240, of which 862 were co-operative distributive societies. The amount of the sales effected by it in 1918 rose to 78,318,021 marks, an increase of about 50,000,000 on those of the previous year. The expenses and salaries were 2,976,138 marks; the net profit was 2,120,765 marks, of which 1,724,158 marks were carried to the reserve fund. A dividend of 6 per cent. was paid on the paid-up share capital.

The owned capital the "Hankkija" at the close of the last three years for which we have figures were as follow :

	1916 marks	1917 marks	1918 marks
Share capital	148,800	188,300	229,400
Guarantee fund (supplementary liability of the members) .	595,200	753,200	917,600
Reserve fund	1,100,000	1,270,642	3,000,000
Other funds	247,815	3,122,444	3,526,020
Total	2,091,815	5,334,586	7,673,200

The following table shows some data regarding the development of the "Hankkija" from 1905 to 1918.

TABLE XV. — *Development of the Central Co-operative Society "Hankkija" from 1905 to 1918.*

Years	Number of members					Number of shares	Amount of sales (in marks)
	Individual members	Agricultural societies	Co-operative distributive societies	Other societies	Total		
1918	302	68	862	8	1,240	2,294	78,318,021
1917	298	68	826	8	1,200	1,883	28,294,553
1916	302	68	736	8	1,106	1,488	20,003,000
1915	317	69	625	—	1,011	1,237	11,303,000
1914	271	67	493	—	832	1,024	7,023,000
1913	196	67	347	—	610	718	6,163,000
1912	156	69	257	—	482	532	5,443,978
1911	148	64	227	—	439	490	4,817,000
1910	122	42	194	—	358	407	3,589,000
1909	121	41	197	—	359	406	2,841,000
1908	25	16	165	—	206	218	3,129,000
1907	—	—	134	—	134	137	2,621,000
1906	—	—	97	—	97	—	1,477,000
1905*	—	—	67	—	67	—	727,000

E. *The Central Co-operative Society for the Purchase of Agricultural Requisites "Labor".*

On 31 December 1918, "Labor" had 1,005 members, of which 134 only were societies, and 871 were individual farmers. Its sales in 1918 amounted to 25,847,570 marks, an increase of about 56 per cent. on the preceding year. As to the goods sold, we have the following particulars for the last four years :

TABLE XVI. — *Goods sold by the "Labor" from 1915 to 1918.*

Goods	1918		1917		1916		1915	
	Quantity in kilograms	Value in marks	Quantity in kilograms	Value in marks	Quantity in kilograms	Value in marks	Quantity in kilograms	Value in marks
Feeding stuffs	1,383,063	1,189,332	7,005,164	2,656,890	28,945,607	6,000,136	22,994,070	5,382,903
Manures	1,846,392	682,040	1,864,950	552,326	6,873,356	290,326	5,473,184	633,207
Machines	—	3,723,168	—	1,221,809	—	901,596	—	650,806
Seed and cereals . . .	2,644,123	6,558,640	2,333,044	5,377,758	2,149,213	1,009,113	2,128,365	816,710
Flour, bran, etc. . . .	—	11,449,624	—	4,393,337	—	3,192,865	—	—
Various goods.	—	—	—	3,393,922	—	1,517,952	—	—
Groceries.	—	2,244,866	—	1,967,038	—	2,087,636	—	—
Total	—	25,847,570	—	16,563,080	—	15,899,624	—	9,435,947

The net profit for 1918 was 605,186, marks, of which 350,050 were carried to the reserve fund.

The funds at the disposal of the "Labor" at the close of the last three years for which we have data were as follow :

	1918 marks	1917 marks	1918 marks
Share capital	81,800	72,950	57,900
Guarantee fund (supplementary liability of members)	1,636,000	1,459,000	1,158,000
Reserve fund	1,000,000	640,000	430,000
Other funds	450,000	301,188	210,762
Total	3,167,800	2,473,138	1,856,662

In the following table we give some data showing the development of "Labor" from 1906 to 1918.

TABLE XVII. — *Development of the Central Co-operative Society "Labor" from 1906 to 1918.*

Years	Number of members			Amount of sales (in marks)
	Individual members	Societies	Total	
1918	871	134	1,015	25,847,570
1917	795	115	910	16,563,080
1916	635	78	713	15,889,624
1915	557	63	620	9,435,947
1914	571	58	429	5,439,000
1913	359	57	416	4,557,000
1912	335	48	383	4,302,000
1911	318	41	359	3,230,000
1910	227	40	267	2,408,000
1909	223	36	259	2,707,000
1908	198	31	229	2,301,000
1907	165	19	184	1,868,000
1906	164	31	195	1,564,000

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

CANADA.

THE RURAL CREDITS SOCIETIES IN MANITOBA. — *Farmer's Advocate*, Vol. LV, Nos 1426, 1430, and 1435: Winnipeg, 21 January, 18 February and 24 March 1920. *Grain Growers' Guide*, Winnipeg, 3, 17 and 24 March 1920. *Canadian Farm*, Vol. XVII, Nos 7, 9 and 19: Toronto 23 and 30 January and 5 March 1920. *Canadian Finance*, Vol. XI, Nos 2 and 7: Winnipeg, 21 January and 7 April 1920.

The development of the rural credits societies in Manitoba (1) has been very rapid. The societies are formed under a provincial act passed in 1917. In that year one society was formed and granted loans amounting to

(1) See our issues of December 1917 pp. 44-46; September 1918, pp. 720-722; November-December 1918, pp. 908-909; June-July 1919, pp. 341-342.

\$ 16,600; in 1918, 10 societies granted loans amounting to \$ 215,581; in 1919, 38 societies granted loans amounting to \$ 1,051,876. The purposes for which loans were granted in 1919 and 1918 were as follows:

	1918	1919
Purchase of live stock	\$ 43,618	\$ 172,532
Breaking new land.	59,437	247,691
Putting in and harvesting crop	66,186	278,741
Purchase of machinery	26,480	94,155
Payment of liabilities	19,860	258,750
	\$ 215,581	1,051,876

At the beginning of the present year the number of societies had reached 59 and it is expected that the number will ultimately be increased to 300. The subscribed capital of the societies actually in operation is about \$ 12,000 on the average and aggregates over \$ 500,000. It is stated that in over two years no losses whatever have been incurred.

The rural credits societies have recently passed through a crisis owing to the refusal of the banks to continue to advance money to them at six per cent. interest. The case for the banks was stated in an article by a banker published in the *Grain Growers' Guide* of 17 March 1920. "The banks hold the view," said the writer of the article, "that, having regard to the value of money and to the conditions existing in this new and sparsely settled country, the societies should be lending at eight per cent. and paying the banks seven per cent. The banks offered to compromise at 6 1/2 per cent. provided a limit were placed on the maximum amount to be loaned to any individual member, so that the operation of the Act would be restricted to its original object, namely, to assist the struggling farmer — but this offer was refused."

The Provincial Treasurer had a conference with the bankers, which however, did not result in a settlement. In his report to the Legislature on the conference, the Provincial Treasurer said: "I am satisfied that the bankers view with sympathy the formation of rural credits societies, particularly in the more backward portions of the province, where they are assisting needy settlers. The banks, however, think that in the administration of the Act two improvements might be made. First, that a maximum loan to any farmer should be set up and that this should not exceed \$ 2,500. Second, that in the older portions of the province, where the district is served by a number of banks, and where they think the needs of the district are fully served, it is a mistake to establish rural credit societies."

Commenting upon this report the *Farmers Advocate* said: "The banks would be willing to let the credits societies develop the country and make it profitable, but after that they want the business."

Failing to come to an agreement with the bankers, the Provincial Government introduced into the legislature a measure to enable the province to accept deposits from citizens and to utilize such deposits for making advances to rural credit societies. The bill was passed and offices are being opened throughout the province for the acceptance of deposits. Efforts are being made to raise by means of deposits \$3,000,000, the sum which it is estimated will be required this year for making advances.

CHILE.

MEETING OF AGRICULTURISTS FOR THE PURPOSE OF FURTHERING THE AGRICULTURAL INDUSTRY. — *Boletín de la Sociedad Agrícola del Norte*. La Serena (Chile). October 1919.

A Congress of Chilean agriculturists was held last September in Santiago, in which nearly all the agricultural societies of the Republic took part. Among the subjects discussed, those of special importance were: the necessity of constituting the Agricultural Union, an association of a permanent character, the object of which is to protect agriculturists and to work for their welfare; the urgent need of taking measures for the improvement of agriculture, such as the establishment of new agronomic stations and of experimental fields for a more judicious selection of seeds and fruit trees; the foundation of establishments for the cleaning and disinfection of seed, and the institution by the government of an experimental station of agricultural machinery, which should periodically inform agriculturists as to the best and most suitable types of machines.

The meeting also turned its attention to questions concerning the improvement of labourers' dwellings, to the development of various industries connected with agriculture, and to the railway problem, suggesting that rapid means of transport of the produce of the above-mentioned industries should be provided, that the carriage of live stock and of agricultural produce should be facilitated by a prudent reduction of tariffs and by means of trains specially devoted to the purpose, and that the cost of carriage of manures should be reduced to a minimum.

The Congress recognised the necessity of speedily putting in force a law with regard to the pledge given to agriculturists to furnish them with adequate means of carrying on stock farming, and for the development of the dairy industry. It was decided that the government should be solicited to make timely arrangements in favour of agricultural credit, and lastly, in view of the necessity of solving the problem of the subdivision of property, it was proposed that the government should be asked for facilities and guarantees for the immigration of agricultural labourers into Chili.

GERMANY.

THE GERMAN COUNCIL OF AGRICULTURE. — *Sozialistische Monatshefte*, No 11, Berlin, 31 May 1920.

On the 20 and 21 April, the German Council of Agriculture (*Deutscher Landwirtschaftsrat*) held a general meeting in Berlin. It asked the new Ministry of Supply and of Agriculture to recognise the exigencies of agricultural production as the principal duty to be fulfilled in order to restore the economic life of Germany, and immediately to carry out a great agricultural programme. To ensure the provisioning of industrial centres and large towns, it asked among other things that to agriculture should be assigned a larger supply of chemical manures and feeding stuffs at moderate prices, and that the cultivation of potatoes, beetroot, etc., should be guaranteed by procuring a supply of skilled labour from abroad. It again urged that in spite of the judicious application of the *Reichssiedlungsgesetz* (the law of the Empire on colonisation) dated 11 August 1919, the compulsory division of large estates would have disastrous effects on the food supply of the country.

MAURITIUS (BRITISH COLONY).

CO-OPERATIVE CREDIT SOCIETIES IN 1918-19. — Report on the Working of Co-operative Credit Societies for the Year ending 30th June 1919. Port Louis, 1920.

There was no change in the number of co-operative credit societies in Mauritius in the year 1918-19. The total number of societies working on 30 June 1920 was 23, and the number of members was 2,781, an increase of 14 over the number at the end of the previous financial year. The total loans outstanding amounted to Rs. 17,043 as compared with Rs. 16,516 on 30 June 1919. The number of members to whom loans were granted during the year was 1,746 or 62.7 per cent. of the total membership. The average amount of the loans was Rs. 146.

Table I shows the aggregate balance-sheet of the societies, together with the average figures per society.

The owned capital (share capital and reserve funds) amounted to Rs. 174,441 as against Rs. 94,404 borrowed from various sources. To the owned capital must be added the proportion of the profits on the year's working which will be credited to the reserve fund, amounting to a further Rs. 14,243.

The total borrowed capital shows a decrease of Rs. 14,922 as compared with the previous year. During the year Rs. 4,955 were repaid to the Government on account of loans made to the societies. No new issues of Government loans were made during the year.

TABLE I.—*Aggregate and Average Assets and Liabilities.*

Assets	Aggregate figures	Average per society	Liabilities	Aggregate figures	Average per society
	Rs.	Rs.		Rs.	Rs.
Cash in hand and in bank	18,500	804	Loans and deposits from		
Loans due by members .	273,430	11,888	non-members	36,049	1,567
Interest due to society .	18,531	806	Loans from Government	36,565	1,590
			Deposits of members . .	21,790	947
			Share capital	121,841	5,298
			Interest due by society .	3,525	153
			Other items	372	16
			Reserve fund	52,600	2,287
				272,742	11,858
			Excess of assets over liabilities.	37,719	1,640
	310,461	13,498		310,461	13,498

TABLE II.—*Aggregate and Average Receipts and Disbursements.*

Receipts	Aggregate figures	Average per society	Disbursements	Aggregate figures	Average per society
	Rs.	Rs.		Rs.	Rs.
Share payments	1,701	74	Share capital withdrawn	1,130	49
Loans and deposits :			Members' deposit with		
By members	8,625	375	drawn	15,325	666
By non-members . . .	12,594	548	Loans and deposits re-		
Loans repaid by members.	253,366	11,016	paid to :		
Interest received	30,321	1,318	Government	4,955	215
Other income	936	41	Non-members . . .	15,660	681
			Loans to members on per-		
Total income of year . .	307,543	13,372	sonal security	255,312	11,101
Opening balance . . .	12,452	541	Interest paid on loans		
			and deposits	6,556	285
			Dividends and bonus paid	461	20
			Establishment and con-		
			tingencies	2,015	88
			Total expenditure . .	301,414	13,105
			Closing balance . . .	18,581	808
	319,995	13,913		319,995	13,913

The proportion of borrowed capital is decidedly low and is quite disproportionate to the credit of the societies as evidenced by the owned capital. Societies have been urged to endeavour to attract increased deposits from members and non-members, but the success achieved has not been large. It is suggested in the Registrar's Report that the best way of meeting the difficulty is by forming a Central Bank.

Table II shows the aggregate and average receipts and disbursements, while Table III gives the aggregate and average profit and loss account.

TABLE III. — *Aggregate and Average Profit and Loss Account.*

Profit	Aggregate figures	Average per society	Loss	Aggregate figures	Average per society
	Rs.	Rs.		Rs.	Rs.
Interest received during the year	30,321	1,318	Interest paid during the year	6,556	285
Other items	936	41	Other items	1,996	86
				8,544	371
			Net profit . . .	22,713	988
	31,257	1,359		31,257	1,359

During the year 16 additional societies completed five years' working since the date of their formation and found themselves entitled to declare a dividend on their shares. Fourteen of these societies availed themselves of their right, as did also the three societies which completed five years' working during the year 1917-1918. Dividends are limited to 10 per cent. until such time as the interest charged on loans shall have been reduced to 6 per cent. The dividends actually declared range from 6.3 up to 10 per cent.

Part II: Insurance and Thrift

ITALY.

THE NEW REGULATIONS FOR AGRICULTURAL, MUTUAL, INSURANCE SOCIETIES

OFFICIAL SOURCES :

- LEGGE 7 LUGLIO 1907, N. 526, PORTANTE DISPOSIZIONI A FAVORE DELLE PICCOLE SOCIETÀ COOPERATIVE AGRICOLE E DELLE PICCOLE ASSOCIAZIONI AGRICOLE DI MUTUA ASSICURAZIONE. *Gazzetta Ufficiale del Regno d'Italia*, No. 177. Rome, 26 July 1907.
- RIFORMA DELLA LEGGE 7 LUGLIO 1907, N. 526, SULLE PICCOLE SOCIETÀ COOPERATIVE AGRICOLE E SULLE PICCOLE ASSOCIAZIONI AGRICOLE DI MUTUA ASSICURAZIONE. Disegno di legge presentato alla Camera dei Deputati nella seduta del 10 maggio 1909 dal Ministro di Agricoltura, Industria e Commercio (Cocco-Ortu). Camera dei Deputati. Atti Parlamentari, n. 125.
- RELAZIONE DELLA COMMISSIONE PARLAMENTARE SUL DISEGNO DI LEGGE SOPRA CITATO, presentata alla Camera dei Deputati nella seduta del 29 giugno 1909. Atti Parlamentari, n. 125-A.
- R. DECRETO-LEGGE 2 SETTEMBRE 1919, N. 1759, CHE STABILISCE NORME CIRCA L'ORDINAMENTO DELLE ASSOCIAZIONI AGRARIE DI MUTUA ASSICURAZIONE RECANDO INOLTRE ALTRI PROVVEDIMENTI A LORO FAVORE. *Gazzetta Ufficiale del Regno d'Italia*, No. 245. Rome, 15 October 1919.
- R. DECRETO 26 FEBBRAIO 1920, N. 271, CHE APPROVA LE NORME PER L'APPLICAZIONE DEL DECRETO-LEGGE SOPRA CITATO.
- CIRCOLARE DEL MINISTRO PER L'INDUSTRIA, IL COMMERCIO E IL LAVORO CONTENENTE ISTRUZIONI PER L'APPLICAZIONE DEL DECRETO-LEGGE SOPRA CITATO.

OTHER SOURCES :

- CASALINI (Mario) : La legge sulle mutue agrarie. In *Cooperazione e Mutualità Agraria*, Monthly Supplement to *I Campi*, Rome, 18 September 1919.
- Do. ; Istruzioni sulla assicurazione del bestiame (Norme, tipo di statuto, decreto sulle mutue agrarie e regolamento). Istituto Nazionale della Mutualità Agraria. Rome, Stab. Pol. Negri, 1920.

In response to the development of agricultural insurance and for the purpose of its better regulation, the provisions of the Law of 7 July 1907, No. 526, as to small co-operative and mutual insurance societies were replaced in so far as relates to this last form of society by those expressly

issued by the Decree of 2 September 1919, No. 1759, of which it is interesting to set forth the principal provisions, bearing also in mind the rules for their application, approved by the Decree of 26 February 1920, No. 271. It seems opportune to recall briefly the precedents of this important reform.

§ I. PRECEDENTS OF THE REFORM. THE LAW OF 7 JULY 1907, NO. 526.

The working of the agricultural mutual insurance societies has hitherto been regulated in Italy by the Law of 7 July 1907, No. 526, which contains regulations with regard to small co-operative agricultural societies and small agricultural mutual insurance associations. This was a first and timid intervention of the legislature on the subject. It proposed to simplify some of the legal formalities which experience had shown to be superfluous and inconvenient for small societies, besides rendering more efficacious in their favour the existing fiscal treatment, and to extend to small insurance societies the benefits conceded to small co-operative societies. The small agricultural insurance societies, though closely resembling the small rural co-operative societies, being founded on a common principle of mutuality and having arisen in the same historic period of organization and development, had not, up to 1907, really shared the advantages granted by the commercial code and by special laws, and they had been constrained to take one of two paths equally illicit — either to live outside the law or to violate it. In fact, not a few agricultural mutual societies lived outside the law, having neither interest nor advantage in possessing a legal constitution in conformity with the commercial code; to a legal existence they preferred an existence *de facto*. Other mutual insurance societies tried to violate the law by calling themselves co-operative societies, and demanding the same treatment, although jurisprudence in Italy maintained that according to the Italian code mutual insurance societies are bodies absolutely different in legal character from co-operative societies, and therefore cannot be assimilated to them, their respective characteristics being incompatible, thus denying legal recognition to the mutual societies which improperly called themselves co-operative societies.

The Law of 1907 aimed at remedying these recognised anomalies, and offering to the small mutual insurance societies the assistance that they claimed, giving them equal advantages with co-operative institutions. They must, however, fulfil the following conditions: (a) they must be agricultural, that is, their object must be to divide among the members the damage caused by agricultural risks, such as mortality and infectious diseases among cattle, fires in plantations, crops, buildings and rural dwellings, hail, frost, drought, diseases of plant, accidents in agricultural labour, etc., (b) they must be small associations, that is, work for a sum total of risks not exceeding 300,000 lire.

The facilities granted consisted in exemption from the double publication of their articles of association, prescribed by the commercial code, whe-

ther in the journals prescribed by the act of constitution (art. 220 of the commercial code), or in the *Bollettino Ufficiale delle Società per Azioni*, and in exemption for ten years from stamp and registration duties, of associations which had assumed risks, as already stated, not exceeding 300,000 lire.

Nevertheless, the Law of 7 July 1907, according to the declaration of the Minister by whom it was proposed, did not completely fulfil the purpose for which it was passed, and at the sitting of 10 May 1909 an amending bill was presented to the Chamber, tending to simplify the formalities of the constitution and working of associations. This bill, owing to a variety of circumstances, did not come on for discussion.

On the other hand, as early as 1912, in the Congress of Agricultural Mutual Insurance, the Italian mutualists called for a law which might bring such institutions under better control, and in a report to the Superior Council of Agriculture, concrete proposals in this sense were presented (1). It was generally deplored that the Law of 1907, passed to facilitate the formation of small co-operative societies and agricultural mutual insurance societies had not accomplished its purpose, having left still existing too many formalities, among which is the obligation to have the legal constitution of societies certified by a notary, thus hindering their rapid formation, and justifying the spirit of mistrust among those agriculturists who preferred societies *de facto* to those legally constituted. As will be seen in the next paragraph, the new decree satisfies the desires repeatedly expressed, and gives hope that mutual fire and cattle insurance societies especially, will become more numerous in the country, with great benefit to the class of small proprietors and tenants.

§ 2. THE NEW REGULATIONS.

According to the Decree of 2 September 1919, and the Regulations of 26 February 1920, agricultural mutual insurance societies desiring to benefit by the facilities granted must above all fulfil the following requirements:

(a) They must have for their object compensation of damage derived from specified agricultural risks; such as risks of whatever nature to real or personal property, or to live or dead stock employed in agriculture or forestry, including market gardening and horticulture, as well as industries connected with them, complementary or accessory, if exercised on account, of and in the interest of any agricultural or forestry undertaking, and with the capital of the firm. Risks of all kinds to which fruits or products of the above-mentioned industries are exposed, are likewise considered agricultural, in so far as they belong to the proprietor or to the person who carries on the agricultural or forestry undertaking.

(1) See *Atti del Consiglio dell'Agricoltura, Industria e Commercio. Annali di Agricoltura*, No. 269. Rome, 1920.

(b) They must work within limits strictly local, that is, must be confined to the commune or fraction where the mutual insurance society has its office, or to several adjoining communes having altogether a population not exceeding 5000 inhabitants; in larger communes subdivided into several districts, the mutual insurance society must not pass beyond the limits of the district. It is understood that a mutual insurance society may include within its own limits even agricultural and forestal undertakings situated outside its territory, but in adjoining communes, where according to its rules the society may act provided the undertaking belongs to one of its own members or to a proprietor whose principal business lies within the said territory. The restricted area renders possible the exercise of reciprocal vigilance among the members, and prevents the formation of clumsy organisations and costly administration, conditions essential for the prosperity of the insurance societies and for their conferring the benefits which are expected from them.

(c) They must determine the amount of the annual contributions; it must not exceed 30,000 lire for each branch of insurance, nor must the total amount for all branches carried on exceed 100,000 lire. In special cases the ministry may permit the limit of 30,000 lire for each branch to be exceeded, if the limit of 100,000 lire is observed for the whole.

(d) They must observe the principle of gratuitous services, exception being permitted only in the case of the secretary and the cashier.

(e) They must exclude all speculation of every kind.

Mutual insurance societies must include in their rules all the objects which in the various cases may be considered adapted to prevent or attenuate the risks insured. Those especially which insure against mortality in cattle must show that their object is also vigilance against disease, care of sick animals and the improved sanitation of stables, sheds and their surroundings. With this object, the insurance societies must insert in their regulations the rules and injunctions needful to prevent losses and to diminish damage.

It is in fact desired that mutual insurance societies should be not alone institutions for encouraging thrift, but also a means for protecting and increasing the national wealth.

As regards the form of constitution, it is laid down that the mutual insurance societies which fulfil the above-mentioned conditions shall acquire legal existence by decree of the prefect, after consultation with a provincial Commission nominated by the Minister of Industry, Commerce and Labour, of which the itinerant professor of agriculture in the chief town of the province must be a member. The promoters of mutual insurance societies will therefore no longer need to solicit the intervention of a notary or to have recourse to the law courts. To obtain the decree they must simply address a request to the prefect, stating the form of rules to which all the adherents have subscribed. In case the prefect should refuse to receive the request, recourse may be had within thirty days to the Ministry, which will decide after consultation with the Council of Thrift and Insurance or a committee appointed by it.

The advantage to be derived from this simple and rapid procedure for the constitution of mutual insurance societies is evident. It is a question, in fact, of societies within strictly local limits, generally formed of small proprietors and tenants, the familiar character of which demands precisely the smallest number of formalities to obtain legal recognition.

The decree of the prefect for the constitution of mutual insurance societies and their rules are published gratuitously by order of the Prefecture in the *Foglio degli annunci legali della provincia*. From the day of such publication the society obtains its legal existence. In the same manner its annual balance sheet must be published.

The rules of the mutual insurance society must indicate: (1) the name it has assumed, its head-quarters, and its limits; (2) the branch of insurance which it intends to exercise; (3) the conditions for admission or withdrawal of its members; (4) the number, the mode of nomination, the functions of the managing committee, and the persons empowered to act on behalf of the society; (5) the limits and the manner of payment of contributions due from the members; (6) the methods of convening the general meeting, and the conditions for the validity of its deliberations; (7) the rules for drawing up the balance-sheets and for payment of compensation for losses, and the allocation of the profits or the distribution of losses; (8) the forms and conditions for the dissolution or liquidation of the society.

The articles of association of the mutual insurance societies regulated as above, and the acts of admission and withdrawal of the members are exempt from stamp and registration taxes. The same exemption is extended to all the documents relating to operations carried out by them. All the sums carried annually by the societies themselves to the reserve fund are also exempted from the tax on personal property. This exemption does not apply to sums which, having been paid into the reserve fund, are at any time and under any name distributed among the members or used to increase the capital.

Thus one of the most debated questions on the subject of the fiscal treatment of mutual insurance societies has been resolved. It was long disputed whether the yearly profits of small mutual insurance societies were subject to the tax on personal property. It was affirmed by most, that as it was not a question of profits of commerce or speculation, the tax could not be levied upon them, but the fiscal authorities did not favour this theory, which however, was fully confirmed by the decree.

The provisions of the regulations regarding the financial procedure of the mutual insurance societies are specially interesting. They must maintain a distinct administration for each branch of insurance, and the rules besides fixing the general entrance fee, must fix a special entrance fee for each branch in which individual members desire to participate. The societies are, however, permitted to maintain a single administration for the different branches of insurance when through the uniformity of the agriculture carried on and the special arrangements of the undertakings involved, it may be possible to mass together the various risks assumed, and when the rules oblige the members to insure all the risks collect-

ively. In this case the general and special entrance fees may be paid in one sum.

The rules of the mutual insurance societies, besides the particulars above-mentioned, must fix the amount of the entrance fees, the rules for the formation of reserve funds for each branch, and the rules and methods for drawing upon these funds in case of there being no profits. The general reserve fund is distinguished from the special reserves. The first is destined to make up for depreciation of value and the loss of the assets of the society and other objects provided for by the rules. It is formed out of the general entrance fees, and a deduction of 10 per cent from the special reserve funds. These latter are constituted for each branch of insurance from the special entrance fees of the respective branches, with deductions from the profits of each branch, and with the interest on the funds themselves. From the special reserve funds for insurance against hail and mortality among cattle, the above-mentioned deductions will be at the rate of at least 50 per cent from the profits of each branch. For other branches the deductions must be at least 20 per cent from the profits of each branch. This apportioning must go on till the respective reserve funds for insurance against hail and mortality among cattle have reached three times the amount of the contributions during the previous year and for other branches double these contributions. At least half the amount of the reserve funds must be invested in securities issued or guaranteed by the State, and the remainder may be invested in shares of local credit institutions, especially those whose work is connected with agriculture.

Insurance in the mutual insurance societies is controlled by the following rules: All proprietors and directors of agricultural enterprises liable to the above-mentioned risks may become members of local insurance societies, provided that in the opinion of the Committee of Management they offer the guarantees and have the qualifications required by the rules. Proprietors or managers usually occupied in trading in cattle which they wish to insure are excluded from insurance against mortality amongst cattle.

Members are obliged: (a) to pay, besides the general entrance fee, the special fee for entrance in that branch in which they wish to participate; (b) to pay the annual preliminary contributions in proportion to the value of the property insured, as well as the eventual supplementary contributions prescribed by the rules of the society; (c) to insure in the company without any limitation all the property they possess liable to the same risk, excluding only the exceptions made by the rules, or fixed from time to time by the Committee of Management.

Members must bind themselves to belong to the insurance society at least for one year, only acquiring the right to indemnities after payment of the fees and contributions prescribed, and after these have been controlled and the time fixed by the rules has expired. The member insured against cattle disease besides other obligations fixed by the sanitary laws must notify to the company every disease or accident to any animal insured,

and from the date of notification it becomes the property of the society, which shall decide whether it can be cured or must be slaughtered.

The member who has insured produce which is damaged by hail must immediately notify the loss to the society, indicating also the means best adapted to prevent an aggravation of the damage. Lastly, the member insured against fire, must immediately notify his loss, its presumed cause, the amount and the nature of the damage, and must also show that he has resorted to all the means at his disposal to diminish loss, direct or indirect.

The highest amount of compensation which in relation to the amount of the damage, the societies can grant, will be fixed by their rules. But in no case shall the amount of compensation exceed 80 per cent of the damage in cases of loss by cattle disease or fire, and 90 per cent if the damage is of any other kind.

Agricultural mutual insurance societies provide for the re-insurance of their own risks, and for the moral and economic protection of their interests, by uniting in provincial federations, which in their turn arrange for re-insurance in the *Istituto Nazionale delle Assicurazioni*, or in other undertakings. Re-insurance is compulsory for hail, and for this branch the societies must carry not less than 10 per cent. nor more than 40 per cent. of the risks. Re-insurance in other branches is not compulsory, but when it is effected, the society must in the case of cattle mortality, carry at least 30 per cent., and for other branches at least 50 per cent. of the risk. Nevertheless for cattle, the society may arrange to re-insure up to 90 per cent. the special risk of mortality from epidemics, themselves carrying the remainder of at least 10 per cent.

Epidemics have always been for insurance societies an important unknown factor. The restricted area in which they work, and the limited number of animals insured, prevent the societies from enjoying with regard to risks the benefits of the law of large numbers. An epidemic may endanger or entirely ruin even a well organised society. Many, indeed, to avoid this danger exclude from compensation loss from mortality due to an epidemic, or else they place it in a category of risks apart, to be compensated out of special funds as far as such funds will permit. But while this may avail to protect the societies from the consequence of a wide-spread mortality disproportioned to their financial powers, it limits too much the benefits which the agriculturist may derive from insurance, not securing him against epidemics, the greatest risk to which he is exposed. Now the possibility of re-insurance, which, as we have seen, may reach a limit for epidemics so high that the societies are enabled to insure the agriculturist against all loss caused by mortality among cattle, and the support of a solid organisation like that of the *Istituto Nazionale delle Assicurazioni*, help him to look to the future with confidence.

The decree regulates and favours the formation of federations, providing that the societies which are not formed into federations for reasons dependent on their own will, shall not enjoy the benefits of the law, nor avail themselves of re-insurance in the above mentioned *Istituto Nazionale*.

But here occurs the idea the importance of which needs no demonstration, that the legislature ought by every means in its power to favour mutual insurance societies on condition that they are constituted and worked so as to answer the purpose for which they were formed. Now it is beyond doubt that agricultural mutual insurance societies on a communal basis can scarcely accomplish their task unless they are consolidated into federal organisations; hence the necessity of provisions relative to this matter.

To form a federation of mutual insurance societies or banks for re-insurance the initial adhesion of at least ten mutual insurance societies is necessary.

The federations are likewise required to inspect the mutual insurance societies belonging to them in order (1) to ensure the observance of all the provisions, laid down in laws, regulations, rules and bye-laws, which govern the federated societies: (2) to verify the regularity of the book-keeping and of the management: (3) to exercise a co-ordinating function by means of advice, instructions and rules for the regular working of the societies and to support their action, especially for the prophylactic protection of animals.

The federations are under the supervision of the Ministry, and if working in conformity with the decree, enjoy the benefits granted to agricultural mutual insurance societies.

The last part of the regulations concerns the action and the subsidies of the Ministry. To facilitate the constitution, establishment and normal working of mutual agricultural insurance societies, a fund of 200,000 lire has been set apart. The Ministry of Industry, Commerce and Labour may intervene in favour of agricultural insurance in one of the following ways: (a) by directly promoting the constitution of mutual insurance societies and federations, or by giving administrative and technical assistance to local initiative when it endeavours to constitute them, if owing to the special conditions of the local agricultural economy, the above-mentioned insurance is recognised as timely and necessary; (b) by providing for the management and opening the accounts of mutual insurance societies and federations; (c) by promoting competitions. For the carrying out of this work it will provide either directly, or by availing itself of the *Istituto Nazionale della Mutualità Agraria*, or by means of prefects, syndics and itinerant professors of agriculture. To promote the formation of mutual insurance societies or federations, the Ministry may send its own representatives to study on the spot the conditions of insurance or agricultural risks, and to stimulate local initiative. It may also invite the promoters or those who are interested to take part in meetings or attend lectures. Under the auspices of the Ministry special propagandist publications will be compiled, illustrating the administrative and technical organisation of agricultural insurance according to the various local conditions of the industry, and according to the special characteristics of the risks to be insured. To mutual insurance societies and federations, whether at the beginning of their working, or subsequently, may be granted gratuitously books, registers and other printed matters necessary for their

administration. The Ministry is bound to give assistance in resolving particular questions relating to management or technical questions, whether concerning mutual insurance societies or federations, and to express its opinion, if requested, as to controversies relating to questions of management or technical questions between the societies and their own members, or between the federations and the societies, arising from the interpretation either of the rules, or, of the conditions of insurance, or of the agreements for re-insurance. The Ministry may grant subsidies to a federation when it is in any of the following conditions: (a) when it has, from causes not due to bad management, lost so great a part of its assets as to compromise its existence: (b) when the accounts of the last year's management closed with a loss, or were balanced only by exceptional deductions from the reserve fund; (c) when it has extended or intends to extend its action to new branches of insurance comprised among those permitted by the decree; (d) if it is just beginning to work. Subsidies cannot however be granted to insurance societies and federations which do not observe the provisions of the law in force, of the rules and of the Ministry. In every case the insurance society or federation must keep the cost of its administration within the limits prescribed by its own importance and by its objects.

* *

We have desired to explain somewhat fully the new provisions regarding agricultural mutual insurance societies in order to give an exact idea of the solution adopted for regulating the business of the societies, for their moral and economic protection, for their grouping in federations, and for re-insurance, provisions which effectively tend to give a systematic organisation to this form of insurance. The *Istituto Nazionale della Mutua-
lità Agraria*, to whose fervid propaganda is in great part due the extension in Italy of such societies, and the beneficent and varied initiative taken in the matter, acknowledges that the decree now examined satisfies fully the requirements of this modest, but essential form of rural thrift, and desires that we may arrive at compulsory insurance, carefully and prudently controlled, especially with regard to mutual cattle insurance societies, which are now the most numerous and which respond to a need strongly felt by agriculturists.

Part III: Credit

ARGENTINA.

THE "BANCO DE LA NACIÓN" AND THE LOANS TO THE AGRICULTURAL AND PASTORAL INDUSTRIES IN 1919.

SOURCES:

Revista de Economía y Finanzas, Buenos Aires, 20 March 1920

Gaceta Rural, May 1920.

La Nación, 13 March 1920.

The report presented by the President of the *Banco de la Nación* to the Finance Ministry on the work of this institution during the year 1919 shows clearly, in comparison with the preceding year, the development of the loans made to farmers, graziers and persons carrying on industries connected with agriculture. It has already been stated in this *Review* that the *Banco de la Nación*, having established its position, since its foundation, in such a way as to enable it to overcome all the difficulties and uncertainties it encountered, especially during the war, was able in a short time, aided by a considerable number of branches, to extend its operations throughout the whole of Argentina, exercising a sustaining power over all the economic forces of the country. From the time of its foundation it granted favourable conditions and immediate help to agriculture and stock farming, by loans to agriculturists during critical periods and times of economic difficulty, by assistance to meet the necessary expenses of sowing and reaping, by encouraging small industries already existing, and aiding with liberal credit those of recent creation, which later extended themselves widely and safely throughout the Republic.

In 1919 the work of the bank as regards agriculture and the allied industries was prompt and productive, meeting the new economic exigencies of the country with adequate arrangements. This work has largely taken the form of loan transactions, of which we now give some particulars.

§ 1. LOANS ON THE SECURITY OF AGRICULTURAL PRODUCE.

The loans granted by the bank during the year 1919 on the security of agricultural produce were effected as regards cereals and flax on the same conditions as the preceding year ; that is, 6 pesos on 100 kilogrammes of wheat or flax, and 3 pesos on 100 kilogrammes of barley or oats, in bags or in bulk, with permission to defer payment till 30 June or 30 September, in order to assist agriculturists during the time of harvest or of sale. But on the other hand the loans granted on maize were raised, because of the increasing cost of harvesting, from 60 centavos to 1 peso 20 centavos for every 100 kilogrammes of produce. These loans were of special advantage to the agriculturists of Buenos Aires, Santa Fé, Entre Rios, Cordoba, and Pampa Central. For husking and bagging maize the bank also granted loans, with an increase as compared with the preceding year of 20 centavos for every 100 kilogrammes of maize husked and bagged, and of 30 centavos for every 100 kilogrammes stored to those agriculturists who had availed themselves of the loan on the crop, and of 1 peso 50 centavos to those who had not taken advantage of that loan. This increase was granted in order to avoid a depression in the value of the grain for want of a market.

To assist the purchase of seed, and to meet the expenses connected with sowing, the Bank authorized its branches to grant loans in the month of April up to 1,500 pesos for 180 days, renewable, if circumstances required it, to 31 March 1920, stipulating that the credit for every hectare sown should not exceed 5 pesos and that the loan should be granted solely on condition that the number of hectares cultivated should not be less than 50.

§ 2. LOANS ON THE SECURITY OF LIVE STOCK.

The special rules governing the loans granted by the Bank to encourage stock farming are suggested by the present condition of this industry, which, together with agriculture, represents the principal wealth of Argentina, as is indicated by the immense extent of the land utilized. For reasons which we cannot now pause to explain, a much larger and more intense encouragement is given to stock farming, especially as regards the production of milk and wool. In fact, the Bank grants loans only to those breeders who are specially occupied in raising cattle and sheep.

The maximum period for these loans is fixed at 24 months, but the bills by which they are effected fall due in 180 days, and are renewable for similar periods, up to the limit of two years. But at the third renewal the debtor must pay 25 per cent of the loan, renewing the debt for the remainder, which must be paid in full when it falls due. In case of failure to pay, the Bank may proceed whenever it pleases to realize the security.

The individuals who avail themselves of these loans cannot obtain any other form of credit with one signature alone, unless they be the owners of their farms; to such persons the Bank can, in exceptional cases, grant further credit also in this form. The interest on the loans is fixed at the rate of $7\frac{1}{2}$ per cent per annum, payable half yearly in advance. If graziers to whom loans have been granted are found not to be conducting their business in a proper manner, the Bank may require from them at any time the total repayment of the debt.

Money can be lent only on the security of cattle or on that of ewes, the young of which, from the age of 18 months, may be accepted as security to the extent of 30 per cent.

An innovation introduced into this kind of loan, which still further proves the desire of the Bank to encourage stock farming, is the institution of credit to assist winter pasturing. Loans are either repayable in full at the end of a period of 180 days or repayable in instalments of 20, 25 and 50 per cent. paid quarterly. As security for this credit, young animals from 18 months to 5 years of age are to a certain extent accepted.

The security remains in possession of the debtor, who assumes for it the responsibility required by law.

While the contract holds good, the Bank may by inspection ascertain the condition of the security, notwithstanding that the debtor sends in a full report quarterly.

Experts will be chosen to value farms intended for the raising of cattle and to verify the amount of the live stock carried. The expert will be remunerated by a commission on the amount of the loan, to be paid by the debtor.

The loan is to be 75 per cent of the value of the farm to proprietors of land who raise cattle and supply milk, and 60 per cent to tenants.

The Bank issues rules for the hygiene of stock farming, among other things obliging proprietors to bind themselves by a written promise, if their farms are without drinking troughs, to construct within 90 days as many troughs as may be necessary for the number of cattle they possess.

§ 3. THE WORK OF THE BANK WITH REGARDS TO INDUSTRIES CONNECTED WITH AGRICULTURE.

As we have already stated, the Bank has largely extended its sphere of action in the course of 1919 by assisting industries connected with agriculture, and especially the characteristic industries of particular zones. In fact, loans were granted on the security of wine in Mendoza, San Juan, and other wine-growing provinces, on rice in Salta, on ground-nuts in Santa Fé, on sugar-cane in Tucuman, on wood in the northern provinces, and on cotton in Santa Fé and Chaco. Lastly, the Bank has taken into consideration a plan for granting special loans for the cultivation of tobacco. In accordance with its system of protecting all the productive forces of the country

it has not neglected to assist with credit for long terms the dairy industry, now become one of the most fully developed industries of the Republic, as shown by the large and steadily increasing figures furnished by the statistics of exportation.

The development of this industry and the interest of the country in increasing it denotes a tendency long perceptible in Argentina to encourage agriculturists in a mixed cultivation of their land. This system has been judged by the economists of the country as the most rational, and most likely to give safe and positive results, as it not only places the farmer in an advantageous position in years of poor crops, but furnishes him with the means of building up, by degrees, a small property for himself.

§ 4. PROGRESS OF THE BANK.

Having pointed out the beneficent effect of the work of the Bank on the greater agricultural industries of the Republic, we now give a summarized statement of the financial position of the Bank during the year under consideration, a position which through the improved economic condition of the country, the increased value of production, and the extension of business in general, is far superior to that of preceding years. The amount of the cheques which passed through the clearing house was in 1918 27,000,000 pesos, and in 1919 rose to 34,000,000 pesos. The loans granted by the branch banks to farmers amounted to 66,447,091 pesos 96 centavos; those to landowners to 156,922,524 pesos 65 centavos. The Bank granted 71,266 loans of less than 2,000 pesos; 10,202 of between 2,000 and 3,000 pesos, and 11,286 of between 3,000 and 5,000 pesos.

The real increase in general deposits, in comparison with the previous year, exclusive of the figures of the clearing-house, was 57,189,940 pesos; the total sums discounted reached 634,000,000 pesos, as compared with 508,000,000 pesos in 1918. The net profit in 1919 rose to 26,016,643 pesos m.n.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

CANADA

THE MANITOBA FARM LOANS ASSOCIATION. — *Canadian Farmer*, Vol. XI, No. 5.
Winnipeg, 17 March 1920

During the year ended 30 November 1919 the Manitoba Farm Loans Association (1) received 795 applications for loans aggregating \$2,532,800 — an average of more than \$3,000 for each application — while new loans were issued amounting to \$1,200,000. Of the applications received \$668,900 were not proceeded with. Bonds sold to the public increased from \$133,995 to \$237,350, and deposits from \$23,350 to \$63,875 during the year. The funds of the Workmen's Compensation Board are now deposited with the association and interest is paid thereon at the rate of 5 per cent. Withdrawals from these funds will be spread over a long period. The total money paid out for loans up to 30 November 1919 was \$3,222,950, of which \$141,014 had been repaid, leaving loans outstanding amounting to \$3,079,935.

The profit and loss account of the association for the year ended 30 November 1919 is as follows:

Profits and refunds.

Interest on Mortgages	\$151,081
Interest on Victory Bonds	1,758
Solicitors' fees, etc., repaid.	222
Insurance commissions.	167
	<hr/>
	\$153,228

Expenses.

Interest on bonds	\$ 103,557
Interest on deposits	6,667
Interest on Workmen's Compensation Board funds	966
Interest on bank overdraft.	4,458
Interest on Provincial account	1,755
	<hr/>
	\$117,405

(1) See our issues of March 1917, pp. 63-67 and June-July 1919, pages 341-343.

Management expenses:

Salaries.	\$ 9,721	
Inspection expenses	2,905	
Other expenses	9,138	
		\$ 21,764
Total cost of operation.		\$139,169
Net profit for the year.		14,050
		\$153,220

ITALY.

PROVISIONS FOR LAND AND AGRICULTURAL CREDIT IN FAVOUR OF ASSOCIATIONS OF AGRICULTURAL LABOURERS. — *Gazzetta Ufficiale del Regno d'Italia*, N° 105. Rome, 4 May 1920.

A decree of 22 April 1920, N° 516, instituted at the *Istituto Nazionale di Credito per la Co-operazione* a "Section of Land and Agricultural Credit" with the object of supplying credit for the benefit of associations for the management of common lands (*università agrarie*) and associations of agricultural labourers, legally constituted as corporate bodies or in the form of co-operative societies, which are proprietors or tenants of lands of which they have obtained possession, either by mutual agreement or by provision of the administrative authorities in the cases contemplated by the Royal Decrees of 2 September 1919, N° 1633, and 22 April 1920, N° 515. The Section is authorised to carry on the following business: (a) farm loans for the management and ordinary cultivation of land and for the transformation of produce; (b) loans for land improvement and transformation from one form of cultivation to another; (c) mortgage loans for the purchase of lands, to free them from charges, to make improvements and changes of cultivation, such loans not to exceed 80 per cent of the purchase money or the estimated value of the lands.

The initial capital of the Section is fixed at 50 million lire, of which a sum of 25 millions is assigned by the State without interest as a special contribution.

The National Bank of Social Insurance, the National Institute of Insurance, the ordinary savings-banks, the *Monti di Pietà*, the land and agricultural credit institutions of the kingdom, and the institutions and societies of ordinary and co-operative credit are all authorized to contribute to the formation and subsequent increase of the capital. The National Bank of Social Insurance may contribute to the extent of ten millions. The State, besides contributing 25 millions to the formation of the capital will furnish other 32 millions in the form of a loan to provide working capital and will contribute at the rate of 2 ½ per cent towards the payment of the interest on mortgage loans. When the Section has

invested at least half of its own capital in such loans, it may then issue bonds to the amount of ten times the capital; the loans however must be made in cash. Bonds may be issued only in proportion to the loans secured on first mortgages. To the loans and bonds the laws on land credit are applicable. Lastly, the decree exempts all transactions of whatever nature inherent in the work of the institution from all taxes for stamps, registration, mortgages, and every other duty or fee.

By this decree promoted by the Ministry of Agriculture, the wishes expressed to the government in April 1919, by the *Federazione Nazionale delle Co-operative Agricole* (Bologna) (1) have been acceded to. These wishes had been expressed as a result of the development of associations of cultivators for the direct management of agricultural enterprises, and were to the effect that the *Istituto Nazionale di Credito per le Co-operative* should be authorised, in a special Section, to grant to such bodies land and agricultural credit in order to place them in a position to proceed to the purchase of land, to carry out cultural transformations and to intensify production.

SPAIN

THE CREDIT BANK OF THE FARMERS' ASSOCIATION — *Banco de Crédito de los Agricultores de España*, No 120. Madrid, February 1920

In continuation of the article published in our issue of February on the Credit Bank of the Farmers' Association, in which were described the organization of the Bank, the method of working and the business done in 1918, we here give some particulars relating to the work of the Bank in 1919.

In the Report presented by the President of the Managing Committee to the General Meeting held on 26 February last, it was admitted that the progress of the Credit Bank had been somewhat slow. If, however, the business done in 1919 were compared with that of previous years, it would be seen that the Bank was steadily progressing and that its development had undergone no check. The Bank was, moreover, formed as an experiment on a small scale, and the time had come to develop it on a larger scale.

As a first step in this direction, it had been decided that the foundation capital should be paid up. At the beginning of 1919 the capital was mainly in the form of personal guarantees or of securities pledged by the members, only one founder's share of 500 pesetas having been paid up. At the date of the Report, founders' shares to the value of 374,000 pesetas had been paid up, leaving 241,500 pesetas in the form of personal guarantees. The total amount of business done in 1919 (2,599,630 pesetas) was considered large in proportion to the available capital and it is felt that it cannot safely be further increased without also increasing the capital.

(1) See our issue of February 1920, page 37

The following table shows the business done by the Bank with societies affiliated to the Farmers' Association in 1919 as compared with business done in 1918:

Business done in 1919 and 1918.

	1919	1918	Increase
	Pesetas	Pesetas	Pesetas
Credits opened	683,600	531,600	152,000
Loans outstanding at beginning of year	218,000.99	128,859.44	90,131.55
Deposits in hand at beginning of year	325,548.82	191,732.54	136,816.28
Sums lent or withdrawn during the year	1,265,909.04	824,635.52	441,273.52
Sums repaid or deposited during the year	1,333,721.01	868,755.59	464,965.42
Interest received	12,288.99	9,597.57	2,691.42
Interest paid	15,085.94	12,161.23	2,924.76
Loans outstanding at end of year	377,272.35	218,991.09	118,280.36
Deposits in hand at beginning of year	517,439.15	328,548.42	188,890.73
Credits available	848,766.80	641,156.83	207,609.97

The net profits in 1919 amounted to 7,245.09 pesetas, and were thus allocated: Interest at 4% on ordinary and founders' shares, 1,520 pesetas; depreciation of furniture and writing off initial expenses, 134 pesetas; bonus to societies, 1,339.54 pesetas; gratuities to staff, 1,125 pesetas; reserve fund 3,126.55 pesetas. The bonus to the societies was equivalent to about $1\frac{1}{2}$ per cent. on the loans they had obtained, and had thus the effect of reducing the interest actually paid on the loans to $4\frac{1}{2}$ per cent.

Part IV: Agricultural Economy in General

BELGIUM AND FRANCE.

THE FOOD SUPPLY OF BELGIUM AND OF THE INVADED REGIONS OF FRANCE DURING THE WAR.

SOURCES:

REPORTS OF THE NEUTRAL COMMISSION FOR RELIEF IN BELGIUM. London.

GOODE (W. A. M.): Relief Work in Belgium. Paper read before the Royal Society of Arts, 24 January 1917. *Journal of the Royal Society of Arts*, No. 3,349. London, 26 January 1917.

CABRIERS DOCUMENTAIRES BELGES, particularly Nos. 51 and 59.

RÉPUBLIQUE FRANÇAISE. CHAMBRE DES DÉPUTÉS, II^e LÉGISLATURE, SESSION ORDINAIRE DE 1919. COMITÉ SPÉCIAL DE RAVITAILLEMENT. RAPPORT DE M. LOUIS MARIN, DÉPUTÉ. LE COMITÉ NATIONAL, SA FONDATION, SON STATUT, SON FONCTIONNEMENT. PREMIÈRE PARTIE. Brussels, 1919.

§ 1. ORIGIN OF THE NEUTRAL COMMISSION FOR RELIEF IN BELGIUM.

Belgium was invaded on 2 August 1914, and as almost the whole of the Belgian territory was soon occupied by the German armies the question of feeding the population soon came into prominence.

In September the Ministers of the United States and of Spain took up the matter. On their initiative two committees were formed at Brussels, one composed of Belgians and the other of neutrals, and a delegate set out for London to obtain help.

On 5 October 1914, the British government authorized the sending to Belgium of a stock of provisions under the safe-conduct of the Ambassador of the United States in London. On 19 October the Spanish Ambassador joined in the work of the original committee, and diplomatic negotiations were opened with a view to supplying food to invaded Belgium. From this time dates the formation of the Neutral Commission for Relief in Belgium (usually referred to by the initials C. R. B.), which worked at first under the presidency of the Ambassadors of Spain and the

United States, joined later by the Ambassadors of the same powers in Berlin and Paris, and finally by the Dutch Minister in Belgium.

France and Great Britain opened to Belgium the credit necessary to assure her food supply, by means of which the Belgian government was enabled to supply funds to the C. R. B. Later on the United States went into the war, and from 1 April 1917 the American government undertook to provide the credit necessary for all the purchases made by the Commission. This continued until 31 December of the same year. From that date it was agreed that the government of the United States should continue to furnish the credit necessary for purchases in the United States, and the British and French governments should furnish the credit required for purchases in Europe.

The C. R. B. and the original Brussels committee, which henceforth included all Belgium under the name of Committee of Relief and Food Supply, formed, so to speak, two sections of one single organisation. They began to work in November 1914, and at first were occupied only with invaded Belgium. But from the month of March 1915, at the request of the French authorities, who supplied the funds, they extended their labours to those departments in the north of France which were occupied by the German armies.

Private generosity in all parts of the world soon came to join the Belgian, English and French governments in the work. The American contributions were very large, thanks to the efforts of Mr. Herbert Clark Hoover, who at this juncture showed himself such an admirable organiser, that later, after the entry of the United States into the war, he was appointed Food Controller.

The C. R. B., under Mr. Hoover's management, made appeals to the public for funds to supplement the resources furnished by the governments. It also had the duty of buying provisions intended for Belgium, and of organising the transport to Rotterdam, and thence to the district depôts.

It was a neutral and private organisation, which the governments of France and England declared to be of public utility. With this sanction the C. R. B. negotiated with the different belligerents to obtain the necessary guarantees for the transport of provisions, supervised the requisitions, and saw that the provisions imported were not prevented from reaching their destination.

The headquarters of the C. R. B. were in New York. In London there was a Committee of the C. R. B. which kept up communication with American citizens living in Brussels. Spain, too, started a propaganda for supplying food to Belgium, and her effort should not be forgotten.

Side by side with the C. R. B., the Belgian National Committee through its executive, provincial and local committees, was occupied in the distribution, throughout the whole extent of the territory, of the imported food and the home produce which it had succeeded in concentrating in its own hands.

The C. R. B. and the National Committee worked in conjunction with one another, the C. R. B. undertaking the direction of the work

outside the country and the National Committee that of the work within the country.

During the first months of occupation the C. R. B. and the National Committee were both employed in provisioning the invaded departments of the north of France.

After some months, a Food Supply Committee for the North of France was specially constituted, on the same general lines as the Belgian National Committee.

The budget at the disposal of Mr. Hoover's organisation amounted to 100 million francs per month.

The work of Mr. Hoover and of many of his assistants was entirely gratuitous; the general cost of the work was only 0.00625 per cent of the receipts. We must also explain how the Belgian National Committee, over which M. Solway, the philanthropic manufacturer, presided, turned to account the assistance it received. It availed itself of the gratuitous aid of 35,000 persons of French or Belgian nationality. Under the direction of M. Francqui, president of the executive committee, the provincial and communal authorities assured the provisioning under the most satisfactory conditions.

When the United States entered the war, long negotiations were necessary to define the new conditions for feeding the population of Belgium. In the middle of May 1917, the following arrangement was made: the C. R. B. retained its existing organisation, working as far as the Belgian frontier, but all the work which it had carried on in Belgium (supervision of distribution, negotiations) was transferred to a new organisation called the Neutral Committee for the Protection of the Food Supply. The London office was placed under the management of the Spanish office and that of Rotterdam under a Dutch manager. The managers acted in concert with the governments concerned, while the American members of the relief committee continued to carry on current business. After 1 March 1917 all the Americans in the occupied territories of Belgium and Northern France were replaced by neutrals — Dutch, Spanish or Swiss. The office in Brussels was thenceforward managed by a Spaniard. Lastly, the vessels of the relief committee were no longer to touch at British ports to be searched.

§ 2. ORGANISATION.

The Commission for Relief and the National Committee drew their resources from:

(1) Subsidies granted by the Belgian government by means of credits opened for it by the French, English, and American governments. These subsidies were furnished in foreign currency (pounds sterling, dollars, etc.), with which the C. R. B. bought food for the inhabitants of the invaded districts, in accordance with a plan fixed in agreement with the allied governments. This food, imported into Belgium, was sold by the

National Committee, at a price agreed upon, allowing a small margin of profit. With the proceeds of the sales, the National Committee paid in Belgium certain obligations of the Belgian government, — salaries, pensions, grants to charitable institutions, etc. — and subsidized works of benevolence established after the beginning of the war. In June 1918 the amount of the subsidies furnished by the Belgian government reached the sum of £57,342,265.

(2) Donations in money and in kind came from all parts of the world, and even from Belgium itself. The total amount of the subscriptions amounted, up to the end of September 1917, to £11,324,886.

The chief office of the C. R. B. was in London, 3 London Wall Buildings. Mr. Hoover remained at its head, although his functions as Food Controller detained him in New York. The C. R. B. had an office in London, a second in Rotterdam, and a third in New York. Before the entry of the United States into the war, it employed in Belgium, on an average, two delegates for each province. The staff of the C. R. B. was almost exclusively of American nationality, and they rendered voluntary service without special salary.

The point of departure of the transports in the great majority of cases was New York, and their destination Rotterdam. The vessels escorting these transports on their departure from New York, received a safe conduct from the German government to guarantee them against being torpedoed; they were to display certain special markings and also to follow a fixed route.

The C. R. B. did not undertake to despatch money; it agreed, however, to transfer funds to Belgium within certain limits fixed by the allied governments. For this purpose it received payments in London, New York and Rotterdam. These sums were entered in its general fund of moneys received to be set aside for purchases, and by means of the sale of the goods purchased the National Committee in Belgium remitted to the payees the sums intended for them according to a rate of exchange fixed in agreement with the Allies. There was thus no transfer of actual cash, but simply transactions in writing between the C. R. B. and the National Committee.

The services connected with the food supply of Belgium and the invaded regions of Northern France were organised in the following manner: The central administration laid down the general rules of which the carrying out was entrusted entirely to the provincial committees. These committees regulated the distribution according to the needs of the province and to the mode of life of the people. Every large town was treated as a province in itself. Under the provincial committees, local committees were appointed in the proportion of one for from 1000 to 5000 inhabitants. In certain provinces of great extent, district committees were established as intermediaries between the provincial and local committees. The local committees were recruited from among the principal inhabitants, chiefly merchants and manufacturers, or persons having a practical

knowledge of business ; they employed a small number of paid agents and distributed food cards, exercising a general control. In their turn they were under the supervision of inspectors delegated by the provincial committees.

In a paper on " Relief Work in Belgium " read before the Royal Society of Arts in London Mr. W. A. M. Goode quoted an extract from the account given by Mr. Robinson Smith of the provisioning of the town of La Louvière in the province of Hainault. From this account we take some important particulars in order to give an idea of the good working of the system. First, the purchases. They were made in America to the best possible advantage of the committee. The goods were collected at New York. For the transport there were special rates on the railways, and also exceptional terms for freight. The central committee in London settled the accounts for the purchases, and by availing itself of all the advantages in regard to exchange which its position on the market gave to it was able in 1916 to economize 509,650 dollars. The goods were unloaded at Rotterdam and placed on barges which carried them down to La Louvière. Rotterdam was chosen rather than Antwerp, although this last was only half as far from La Louvière, because barges belonging to the Dutch government could be used, and the expense was thus considerably reduced. The provincial committee of Hainault paid the national Committee at Brussels for the cargo destined for La Louvière before it left Rotterdam. On its arrival at La Louvière it was allotted after the following plan :

The town was divided into six districts, each comprising 4,000 individuals or 1,000 families. By a census controlled by the declarations of the heads of families the number of persons to be rationed could be fixed. At the door of each house a notice was affixed declaring that the provincial committee of Hainault delivered for that house a specified number of rations. In this way the vigilance of the public could be exercised, and there was little chance that changes of abode could give rise to fraud. As to the distribution of provisions, let us take for example bread. Those concerned, in the proportion of one for each family went to the central bread dépôt on Mondays and Thursdays at different hours according to the initial of their surnames. The persons presenting themselves were provided with their individual or collective card, which bore in red figures the number of rations, and therefore the number of loaves to be received. The card bore 90 dates, and could therefore be used for 45 weeks. The system of tickets had been deliberately rejected, as being more costly and less certain.

It followed that the consumer did not buy at the baker's shop ; he bought at the dépôt where every baker had a space reserved for him. Each baker was required to furnish a fixed quantity of bread. The customer addressed himself to the baker he preferred. The competition maintained among the bakers was to the great advantage of the public.

A similar system was applied to other articles of food.

Here follow some general statistics for the period between 1 November 1914 and 31 March 1917 :

Population revictualled	Belgium	7,400,000
	France	2,150,000
Indigent people with no other resource then re-victualling	Belgians	3,000,000
	French	1,000,000
Belgians and French employed in the work of distribution		35,000
Area of territory provisioned (square miles)		19,455
Communal warehouses		4,657
District depôts		156
Vessels chartered permanently by the C. R. B.		70
Cargoes from overseas unloaded at Rotterdam		470
Partial cargoes from other countries especially from England		923
Total of metric tonnage of goods delivered at Rotterdam		2,544,512
Maximum tonnage delivered in one month (November 1915)		151,208
Saving effected in sending funds to Rotterdam . . . £		51,907
Record of discharge at the port		9,641 tons of wheat in 20 hours
Average distance of Rotterdam from the district depôts		156 miles
Barges sent out from Rotterdam		6,669
Number of times goods were sent by train from Rotterdam (7,701 trucks)		1,103
Cost of keeping at Rotterdam the boat from the Belgian or French depôt per metric ton (total comprising all expenses at Rotterdam)		2 sh. 7 d.
Number of garments distributed		11,000
Number of person employed in making or mending clothes		60,000
Number of American volunteers continually employed to work in the country		50
Americans employed at the work from the beginning		180
Cost to the C. R. B. per head and per day for food		1 1/2 d.
Total cost per head to the C. R. B.		1 1/2 to 1 p. 100
Cost to the communes of 100 francs worth of food furnished by the C. R. B. to the provincial committees		103 fr.
Average price of 2 kilogrammes of bread during the war		8 d.
Charitable gifts sent by Great Britain £		3,091,683
Charitable gifts sent by the United States £		2,219,247
Charitable gifts sent by other countries £		287,496
Total receipts in cash from gifts, government subsidies, etc.		£ 56,012,078
Value of goods and articles of clothing distributed in Belgium and in the north of France		£ 54,524,241

§ 3. FOOD CONDITIONS IN INVADIED BELGIUM.

We extract the following particulars from a report presented to the C. R. B. in June 1917 by M. Maurice Pate, delegate of the C. R. B. for the province of Hainault.

From the beginning of the submarine war *à outrance* the food rations of the inhabitants of occupied Belgium diminished rapidly. During the first days of February 1917, the combined ration of peas, beans, and rice which in Hainault was at first 1,000 grammes was reduced to 500 grammes, that of bacon and lard fell from 800 to 400 grammes per month; on 15 February the daily ration of flour, which at first was 300 grammes, was lowered to 225; that is, an average diminution of $\frac{1}{3}$ in all provisions. There were no reserves, and very little could be drawn from the soil.

The prices of articles of food were as follow:

	Price per kilog fr.
Meal	10
Lard	14
Eggs, each	0.50
Milk, per litre.	0.70
Butter	18
Potatoes	1.50
Carrots	1.60
Beetroot	0.75

§ 4. THE FOOD SUPPLY OF NORTHERN FRANCE DURING THE GERMAN OCCUPATION.

In the north of France we find, as organisations of management, administration, allotment and distribution: the C. R. B., the Belgian National Committee, the Northern France Committee, the communal, regional, and district committees.

The north of France was divided into six districts: Lille, Valenciennes, Saint-Quentin, Vervins, Charleville and Longwy. The people of the region of Givet-Fumay were attached, for purposes of provisioning, to the province of Namur (Belgium), and should be added to the following figures: their number was 21,234 on 31 December 1917.

TABLE I. — *Population Provisioned.*

Date	Number of communi-	Number of inhabitant-
1914-1915	1,582	2,125,000
31 December 1916	2,133	2,140,615
31 December 1917	1,548	1,744,364
1 July 1918	?	1,691,917

Transport and Distribution. — The goods were forwarded by canal, and then by rail from Rotterdam or from Brussels to the central depôts of the district. Thence they were sent on by rail to the regional centres, from which they were taken by rail or by carts to the communal centres, where they were distributed to the consumers.

Scale of rations. — The rations were fixed according to the following scale by the Northern France Committee, but in reality the distribution did not always agree with this scale, on account of the difficulties of provisioning.

TABLE II. — *Scale of Rations in 1917.*

Provisions	January	February	March to June	1 July to 15 Aug.	16 Aug. to 30 Sep.	10 Oct. to 30 Dec.	10 to 31 Dec.	Observations
	gram- mes	gram- mes	gram- mes	gram- mes	gram- mes	gram- mes	gram- mes	
Flour	300	220	220	220	250	250	250	Plus supplément de 30 à 50 gram- mes pour le dis- trict de Lille and Valenciennes.
Bacon, lard or pre- served meat . . .	50	30	30	30	50	50	50	
Beans, peas, rice, etc.	100	30	50	50	30	30	50	
Sugar	15	10	10	10	10	10	10	
Coffee or substitute	17	10	10	7	7	7	7	
Soap	15	10	10	10	10	10	15	
Biscuits	none	none	none	22 to 30	20 to 30	20 to 30	20 to 30	Soap was seldom distributed.

Condensed milk . . Invalids, children, old people, 50 grammes per head
per day.

Financial organisation and payment for the goods. — The goods were invoiced by the C. R. B. to the Belgian National Committee, which in its turn invoiced them to the Northern France Committee, which invoiced them to the district committees.

The prices, including those charged to the districts, were those of the C. R. B. without any increase; the cost of transport was charged by the Belgian National Committee to the Northern France Committee, which recorded the transaction. The districts invoiced to the regional committees at a rather higher price, in order to meet the cost of transport, storage and administration. Afterwards the regional committees invoiced to the communes at the price they had paid, all the expenses of the regional committees being defrayed by the district. Lastly, the communes fixed the price of the various supplies at a rate slightly higher than that charged to them by the district committees.

All prices, in all the centres of distribution, were subject to ratification by the commission. As an example we now give the retail prices of goods in the district of Valenciennes during the years 1916 and 1917.

TABLE III. — *Retail Prices of Provisions in the District of Valenciennes.*

(Years 1916 and 1917).

Provisions	31 March 1916	30 June 1916	30 Sep- tember 1916	31 Dec- ember 1916	31 March 1917	30 June 1917	30 Sep- tember 1917	31 Dec- ember 1917
	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
Bread	0.385	0.40	0.40	0.40	0.40	0.40	0.40	0.50
Bacon	2.60	2.60	2.60	2.60	3.—	3.—	4.—	4.50
Lard	2.30	2.30	2.30	2.30	2.80	2.80	4.—	4.50
Salt beef		"	"	"	2.—	2.30	3.50	3.50
Condensed milk in tins: per tin . .	0.90	0.90	0.90	"	"	"	"	1.42
Evaporated milk in tins: per tin . .	"	"	1.05	"	"	"	"	"
Butter			"	"	6.25	6.50	"	7.50
Dutch cheese	"	"	"	3.25	"	4.25	4.25	4.25
Dried beans, peas	0.90	0.90	0.90	0.90	1.15	1.15	1.15	1.40
Rice	0.60	0.60	0.60	0.60	0.85	0.85	0.85	0.90
Cream of rice	"	"	"	0.70	0.70	0.85	0.85	"
Cerealine	0.55	0.55	0.55	0.55	"	"	0.65	"
Macaroni, etc.	"	"	"	"	"	"	1.35	1.75
Biscuit	"	"	1.—	1.—	"	1.25	1.60	1.70
Biscuit powder	"	"	"	"	"	1.—	1.25	1.60
Milk food for children	"	"	1.50	"	1.50	1.50	"	"
Prepared food for children	"	"	"	1.50	"	"	1.70	1.75
Sugar	0.90	1.—	1.—	1.—	1.10	1.10	1.50	1.25
Raw coffee	1.75	1.75	1.75	1.75	2.20	2.20	2.20	3.—
Mokaline	"	"	"	"	"	"	1.50	1.50
Cocoa	"	"	"	"	3.60	3.60	4.20	"
Cocoa milk	"	"	"	"	"	"	"	2.20
Smoked herrings	"	"	"	"	"	"	"	1.68
Sour kraut	"	"	"	"	"	"	"	0.80
Dried vegetables	"	"	"	"	"	"	"	5.—
Onions	"	"	"	"	"	"	"	0.60
Salt	0.10	0.10	0.12	0.12	0.12	0.12	0.12	0.12
Vinegar	"	"	0.50	0.50	0.50	"	0.50	0.50
Starch	"	"	"	"	1.70	1.70	1.70	1.70
Soap	1.—	1.30	1.30	1.30	1.30	1.30	1.30	"

The communes were responsible to the regional committees for the amount of goods received and distributed.

The regional committees kept an account with each of the communes, requiring from them the ratification of the sum total of their debt, which increased every month.

In each commune the inhabitants were divided into three categories : (1) those who could pay and ought to pay ; (2) those who were temporarily without ready money, or possessed securities which they could not realize ; these received food on the understanding that it was to be paid for later ; (3) the indigent, who received food gratis.

The majority of the communes agreed to grant to the families of mobilized men and of civil prisoners interned in Germany, advances on the allowances coming to them ; some communes granted loans to solvent persons.

The profits on sales to those of the inhabitants who paid for their provisions, were at first applied to the cost of administration, transport, and distribution, then to the repayment of communal loans, road mending, cost of municipal services, and of schools, and payment of war taxes ; the money in the bank was placed at the disposal of the regional committees.

Method of regulating the accounts between communes, regions, districts, the Northern France, the Belgian National Committee, and the C. R. B. — Because of the absolute prohibition to export specie out of the French occupied territory, the debts of communes to regions, of regions to districts, of districts to the Northern France Committee, of this Committee to the Belgian National Committee, or, lastly, of the National Committee to the C. R. B. could not be paid except by receipts and guarantees in paper of one kind or another. There were some exceptions to this general rule, in so far as certain communes paid a part of their debts to the regions (that is to the districts), in cash (German marks and local notes). These cash payments consequently formed certain assets in the hands of the districts to be set against their liabilities towards the Northern France Committee, but no part of this cash was available for payments of the debts of the Northern France Committee, through the Belgian National Committee, to the C. R. B.

The districts and subdistricts were in debt to the Northern France Committee to the amount of 353,094,277.09 fr. on 31 December 1916, and of 626,633,874.56 fr. on 31 December 1917. This debt represented 319.50 fr. per head of the population.

§ 5. THE FOOD SUPPLY OF THE LIBERATED DEPARTMENTS OF FRANCE.

The measures taken previous to the armistice must have produced their effects from the moment of the definite liberation ; we are therefore obliged to consider two periods, the one preceding the armistice, the other after that date.

As soon as part of the territory of France was invaded, the idea oc-

curred to the government of associating the chambers of commerce of the invaded territory in the work of provisioning. For this purpose, laws, and decrees ratified by laws, opened credits to chambers of commerce, enabling them to co-operate in provisioning the inhabitants of the invaded territories as soon as they were liberated.

The following table shows the amount of the sums advanced by the State to the four chambers of commerce entrusted with this work without interest, but to be refunded.

TABLE IV. — *Advances Granted to the Chambers of Commerce of the Invaded Regions.*

Chambers of Commerce	Territory to be provisioned	Population	Advances made fr.
	Nord	1,060,000	12,800,000
Dunkirk	Pas-de-Calais	220,000	2,700,000
	Somme	120,000	1,500,000
Saint-Quentin	Aisne	350,000	15,000,000
Charleville	Ardennes	207,000	2,600,000
Bar-le-Duc	Meuse	40,000	2,200,000
Total . . .		1,997,000	36,000,000

As regards the other departments partially occupied by the armies, and not included in this table (Oise, Marne, Vosges, Meurthe et Moselle), measures were taken by the government and the general councils to provide for their necessities.

The four chambers of commerce entrusted with the work of provisioning formed stocks of food by means of the advances made by the State.

These stocks necessarily varied in importance because they were subject to the influence of military events at critical periods. They were, for the most part, stored in the general warehouses at Saint Denis, where the chambers of commerce of Dunkirk, Saint Quentin and Charleville had their principal dépôt. The chamber of commerce of Bar-le-Duc stored its stock at Bar-le-Duc to facilitate its work.

Formation of stocks of provisions. — To avoid the arbitrary selection of provisions, it was decided from the beginning of hostilities, to form a stock of provisions for an average of twenty days, in the proportion of a standard daily ration fixed in grammes as follows; flour 170, rice 23, beans 40, bacon and fat 30, preserved meat 20, raw coffee 13, roasted coffee 10, chicory 3, sugar 15, oil 1, vinegar 1, salt 15, pepper 1, chocolate 6, condensed milk 25, macaroni, etc., 10, candles or carbide 5, soap 15, washing

powder or lye 10, potatoes 40, and packing 35. For each chamber of commerce the quantity of stock was ascertained by multiplying this ration by the number of inhabitants to be supplied, and by 20, as the provisions were to serve for an average of 20 days. This period was considered as sufficient to allow the local trade to revive, but it was understood that the chambers of commerce should continue their work considerably beyond this limit, on condition of being paid for their goods on delivery, so that they might replenish their stocks, as long as the necessities of the population required.

Carrying out the programme of provisioning. — Of the four chambers of commerce entrusted with the duty of provisioning, that of Charleville had only to do preparatory work, because of the invasion of the whole department of Ardennes; it laid in supplies of which it could ensure the preservation, taking care to dispose, at the proper time, of goods likely to be spoiled. Its balance sheet, closed at 31 July 1918, showed 891,346.06 fr. of goods stored or on the way to their destination. But it had made no division or distribution of goods to the civil population.

The chamber of commerce of Bar-le-Duc, entrusted with the provisioning of Meuse, had laid in a stock called "intangible" entirely reserved for the population of those parts of the department not yet liberated. In the month of October 1918, this stock was composed of 480,600 quintals of various goods. Independently of this it assisted local provisioning by handing over to the trade articles of food that were required. It considered that its work should not be limited to supplying articles of food alone, and with the large stocks of coal it had collected, it was able to supply the industries of Meuse, which otherwise would have had to slacken their work. It may be added that when the Germans attacked Verdun, the civil population would have been in a very critical condition if the Bar-le-Duc chamber of commerce with its accumulated reserves had not come to its help.

The chamber of commerce of Dunkirk had the heaviest task of all, because of the amount of the credit granted to it (17 millions of francs) and of the large population to whom it had to ensure provisions in the three departments of Nord, Pas-de-Calais, and Somme. At the time of the offensive on the Somme in 1917 it had kept in close touch with the prefects, and was able immediately to respond to the requests addressed to it for provisions. Through it the civil populations of the Somme and Pas-de-Calais, liberated about this time, received the needful supplies. It appears from statements of accounts that from 23 March to 2 May 1917, it sent to the prefect of Somme various provisions of the total value of 299,984 fr. The prefect of Pas-de-Calais received, between April and August 1917, more than 320,000 francs worth of goods.

Moreover, by an agreement with the Belgian government, the Dunkirk Chamber of Commerce placed at the disposal of the Belgian authorities, from 19 June to 16 July 1917, 590 000 kilogrammes of flour, representing the sum of 1,170,000 francs. Lastly, we must mention the assistance given by this same chamber of commerce to the communes and

public institutions of the departments of Nord, Pas-de-Calais, and Somme. The value of the transactions in goods with these administrations amounted to 4,136,044.70 fr. at the end of September 1918.

The Saint-Quentin Chamber of Commerce, specially entrusted with the provisioning of Aisne, not content with laying in food supplies for the liberated population, also facilitated the revictualling of those near the front by abundant supplies at the time when the important localities of the department were exposed to bombardment by the enemy.

Period of liberation. — In October 1918, following on the rapid advance of the troops, then more quickly still because of the armistice, France undertook the entire provisioning of nearly 3,500,000 inhabitants, of whom 1,800,000 belonged to the liberated regions, properly so called, and more than 1,500,000 to Alsace-Lorraine. This additional charge raised great difficulties, occurring as it did when provisioning was hindered by the acute crisis in land transport, and when the effects of the armistice on maritime transport had not begun to be felt. The civil population of the liberated regions were without any means of transport or any means of communications. The railways and canals, destroyed throughout a vast extent of country could only be restored by degrees. The roads themselves were impassable.

However complex the problem might be, the Ministry of Food Supply had to endeavour from the first day to furnish all necessary supplies to the population. For this purpose from 18 October 1918 instructions were addressed to the authorities, which may be thus summed up :

(1) The supplies usually kept in the station warehouses, and forming part of the daily provision for the troops, were to be furnished to the liberated populations by the military authorities at the following scale of rationing : bread 500 grammes ; meat 300 grammes ; dried vegetables or rice 60 grammes ; salt 20 grammes ; sugar 32 grammes ; coffee 24 grammes ; lard 30 grammes ; petrol 9 grammes ; oats 2 kilogrammes.

(2) Other provisions, including wine, were to be supplied from the stores laid in by the prefects and chambers of commerce.

The deficiencies which occurred in provisioning some of the liberated districts were solely owing to the insufficiency of means of transport, railways or motor lorries.

Another serious difficulty was to ensure a system of distribution which should reach all consumers in districts where trade no longer existed, or where no goods were to be had. It seemed that the only possible plan was to make use of organisations which had arisen spontaneously during the German occupation, to distribute the supplies furnished by the C. R. B. On the other hand, the C. R. B. had made an offer to the French government to continue its assistance. This was accepted, not only to enable the people to receive the necessary provisions at as low a price as possible, but also to relieve the railway system, then so incomplete on the French side of the devastated zone, by forwarding some of the goods by the Belgian railways from the north to the south. The following are the regula-

tions in detail which were drawn up with this object in agreement with the Ministry of the Liberated Districts:

The revictualling of the liberated districts of the north and east of France, until it was possible to return to the normal economic life, was to be ensured under the authority of the French government, by a committee called "General Committee for provisioning the Liberated Districts with the aid of the C. R. B.", which continued the work accomplished during the German occupation by the Northern France Committee.

The object of the General Committee was: (a) to assure the distribution and sale of provisions of primary necessity: (b) to facilitate by every means the resumption of normal existence with respect to food supply by assisting co-operative and commercial organisations: (c) to improve by every means the material condition of the liberated populations.

The entire direction of the General Committee was entrusted to an executive committee established at Lille.

The liberated regions were grouped in four districts for purposes of food supply, which in each district was assured by a district committee, and in the arrondissements by an arrondissement committee. The arrondissements were subdivided into regions, the number and importance of which were decided by the arrondissement committee. At the head of each region was a regional committee, and in each commune a local committee.

As a rule the local committees which worked during the German occupation remained in operation, but as normal conditions began to be resumed they might be subject to modifications on the suggestion of the municipal councils, and with the sanction of the arrondissement committees. The executive committee decided without appeal. The arrondissement and regional committee were also as a rule composed of the members of the old committees which worked during the German occupation; they were appointed by the executive committee on the proposal of the district delegates.

Each arrondissement committee appointed one of its members as permanent delegate to the district committee.

The district committee was formed of district delegates appointed by the executive committee, and permanent delegates from the arrondissement committees.

The functions of the executive committee were the general organisation and management of the food supply, especially in deciding as to what was needed; it assured the satisfaction of the needs of the population by means of the goods furnished either by the Under-Secretary of State for Food Supply or by the C. R. B.; it supervised the distribution as well as that of the supplies furnished by the various committees within their different limits.

As a rule the Under-Secretary of State furnished flour, frozen or fresh meat and potatoes, and the C. R. B. the other provisions.

The General Committee for Provisioning the Liberated Districts was accountable to the French government and also to the C. R. B. for food

and other articles delivered by each respectively. These various articles were invoiced to it, to be afterwards successively invoiced to the district, arrondissement, regional and local committees.

The financial responsibility of the C. R. B. to the French government was covered by vouchers for the distributions made by the General Committee. In the same way the financial responsibility of the General Committee to the French government was covered by vouchers for the distribution of food and for assistance given to the inhabitants.

The prices of food supplied to the people by the committees were uniform throughout the liberated regions; they were fixed by the executive committee taking into account the general expenses of every kind that fell on the different distributing committees.

The object in view was to return to a normal system of provisioning, carried out by trade and by co-operative societies which alone have the elasticity necessary to allow of the fulfilment of all requirements. For a long time still it will be indispensable to maintain, in most of the districts, an artificial system of administrative provisioning which alone can assure the existence of the people. On the other hand, administrative provisioning furnishes only what is essential to existence. Now it is most important

that its work should be completed by the supply of articles which, if not of primary necessity, are none the less indispensable to procure for the people sufficient means of existence (for instance: wine, beer, oil, vinegar, etc.). In order to procure these provisions, the chambers of commerce have been invited to co-operate in the work of provisioning. Adapting themselves to the new circumstances, they place at the disposal of the prefects and local commercial committees the goods not delivered by the State. Through their action and the credit at their command they prevent an increase of prices and facilitate existence.

It is clearly understood that this administrative provisioning can only be temporary and that by degrees there must be a return to ordinary conditions. With this in view, as soon as the supplies administratively provided arrive in sufficient quantities, the provisioning committee must utilise co-operative and commercial organisations to whom the supplies may be delivered with the certainty that they will be sold to the consumers without excessive increase of price. This system is already employed in the regions of Lille, Roubaux and Turcoing, but it is evident that the existence of the liberated population will remain precarious until the railway and river communications are entirely restored, and until the means of transport more generally correspond with the necessities of the situation.

SPAIN.

THE LAW ON THE EIGHT HOURS WORKING DAY.

OFFICIAL SOURCES :

REAL DECRETO FIJANDO EN OCHO HORAS AL DÍA, O CUARENTA Y OCHO SEMANALES, LA JORNADA MÁXIMA LEGAL EN TODOS LOS TRABAJOS. *Gaceta de Madrid*, No. 94, 4 April 1919.

REAL DECRETO ENCOMENDADO A LAS JUNTAS LOCALES DE REFORMAS SOCIALES LA PROPUESTA DE EXCEPCIÓN E LA JORNADA MÁXIMA DE OCHO HORAS. *Gaceta de Madrid*, No. 263, 24 August 1919.

REAL ORDEN ESTABLECIENDO LAS NORMAS GENERALES DE APLICACIÓN DE LA JORNADA MÁXIMA DE OCHO HORAS. *Gaceta de Madrid*, 16 January 1920.

REAL ORDEN ESTABLECIENDO LAS EXCEPCIONES DE LA JORNADA MÁXIMA DE OCHO HORAS. *Gaceta de Madrid*, 16 January 1920.

INSTITUTO DE REFORMAS SOCIALES : LA JORNADA DE OCHO HORAS. (Extract from the Report of the part relating to agriculture). *Boletín de Agricultura Técnica y Económica*, No. 133. Madrid, January 1920.

BOLETÍN DEL INSTITUTO DE REFORMAS SOCIALES, Year XVI. Madrid, 1919.

OTHER SOURCES :

LA JORNADA DEL TRABAJO AGRÍCOLA. Reclamación formulada por el Instituto Agrícola Catalán de San Isidro. *Revista del Instituto Agrícola Catalán de San Isidro*, Nos. 18 and 19, September and October 1919.

LA IMPLANTACIÓN DE LA JORNADA DE OCHO HORAS. *El Imparcial*, No. 1894, 29 September 1919.

INFORME SOBRE LA APLICACIÓN DE LA JORNADA DE OCHO HORAS A LOS TRABAJOS AGRÍCOLAS. *Boletín de la Asociación de Agricultores de España*, No. 123, September 1919.

LA JORNADA LEGAL Y LAS FAENAS AGRÍCOLAS. *El Imparcial* No. 19,033, 5 February, 1920.

INSTANCIA DE LA ASOCIACIÓN DE AGRICULTORES AL MINISTRO DE LA GOBERNACIÓN. *Boletín de la Asociación de Agricultores de España*, No. 128, January 1920.

In accordance with the proposal of the *Instituto de Reformas Sociales* the government of Spain on 3 April 1919 submitted for the royal signature a decree which established that from 1 October of that year the maximum duration of labour in every workshop, undertaking or firm should be limited to eight hours per day or forty-eight hours per week.

But considering that for some industries the limitation imposed might cause loss or even ruin, the same decree provided that certain special organisations should be formed for enquiry into the cases in which a departure from the provisions of the decree might be advisable. This was confirmed by the Decree of 21 August 1919, which provided that if

these new organisations, the *Comités Paritarios* (1) desire to obtain exemption from the general requisitions of the decree of the 3 April, they must before the fixed date, 1 October, present a petition to the *Instituto de Reformas Sociales* explaining the reasons for their request, and the *Instituto*, from which there is no appeal, was to decide before 1 January 1920, whether the exemption shall be granted or refused.

As already stated, the Decree of 3 April, while granting the benefit of a maximum working day of eight hours to all the working population, whether male or female, agricultural or industrial, recognizes that this humanitarian provision cannot be applied indiscriminately to every branch of human activity, and in order that the legislature may be able to form a correct judgment as to the cases in which the application of the law might have evil consequences, Art 2 of the Royal Decree of 21 August 1919 provided that associations, whether of employers or employed, industrial enterprises or other bodies connected with labour, might present to the Local Councils of Social Reform any proposal that might seem desirable for the better application of the eight hours law.

All these bodies, after examining the subject in every aspect, hastened to present memorials and reports concluding on general lines that for agricultural labour the government ought certainly to grant exemption, some requiring absolute exemption, others declaring that they would be satisfied with partial exemption in certain defined circumstances.

The *Instituto de Reformas Sociales* having examined all the petitions and requests for exemption, drew up a bill which formed the basis of the Royal Decree of 15 January 1920. It is clear that this decree contains provisions for every kind of labour, but those more strictly connected with agricultural labour may be summed up in the following regulations: Farm labourers bound by an annual contract must have not less than eight hours of rest daily, if consecutive, and nine when, owing to the necessities of the labour, the period of rest cannot be uninterrupted. Besides this, for every six days of labour a whole day of absolute rest must be given. For temporary labourers, bound by short contracts, exclusively for harvesting, sowing or working to counteract diseases of plants, the day's work may be prolonged to ten hours provided that the two additional hours are paid for separately. A similar exemption is granted in the case of workmen employed in the transport of agricultural produce, but only for the usual period of harvest. For men employed in horticulture the eight

(1, The *Comités Paritarios* are bodies constituted by the representatives (*vocales*) of special industries or categories of industries, of professional associations or of the working class in special urban or rural centres, of whole districts or even of the whole nation grouped according to convenience or professional requirements. These were to be formed by the Commissions of Regional Organisation (bodies constituted specially for this object) and were to include equal numbers of representatives of employers, of working men and of the State. See Nos. CLXXXIX, CLXXX, CLXXXI and CLXXXII, respectively of May, June, July, and August 1919, of the *Boletín del Instituto de Reformas Sociales* for the regional division of the territory of Spain and the grouping of industries into categories as the effect of the application of the decree fixing the maximum working day.

hours' limitation takes effect except during the period of heavier work, which however must not exceed the maximum of three months in the year. Also for rural farriers during seedtime and harvest, two hours' additional work is permitted, as also during the period immediately succeeding the vintage those employed in making wine and cider may be kept at work for more than eight hours.

Other exemptions are granted for guardians of fields and rural property when fruit is ripening, and for shepherds and herdsmen. When necessity requires that men should be kept at work on holidays, an agreement should be made with the employer that each man should in turn be allowed to absent himself to perform his religious duties.

We have thought it desirable to give in chronological order the contents of these three decrees issued by the government on this important question, in order at once to convey a complete idea of the situation as developed between April 1919 and January 1920; but it would seem that the later provisions cannot be considered as definitely fixed; others are expected more carefully considered, and complete, and better adapted to satisfy the legitimate expectations of both workmen and employers.

After the publication of the first decree a chorus of protests arose from no fewer than four hundred local councils, and from numerous agricultural organisations, as for instance, the *Asociación de Agricultores de España*, the *Confederación Nacional Católico-Agraria*, and the *Instituto Agrícola Catalán de San Isidro*; also from some Provincial Councils of Agriculture and from agricultural associations and federations. Especially worthy of consideration is the protest of the *Asociación de Agricultores de España* because it is the legitimate representative of a great number of agricultural interests, and more than any other it has always had at heart the moral and material improvement of farm labourers. But no less important is the report of the *Instituto Agrícola Catalán de San Isidro* because it clearly sets forth the reasons that ought to guide the legislature in the interests of agriculture, not to enforce the carrying out the law; but all the more important associations, each on its own account, have sought the best methods of indicating to the government the wisest course to be followed with regard to agrarian policy, in order to ensure the steady development of agriculture in Spain, and to secure for the country a corresponding prosperity. The inherent question for the rulers of Spain, as also for those of every other country in Europe, is to work out efficacious means of increasing agricultural production while diminishing the cost, and it does not seem that the application of the eight hours' labour law has a decided tendency in that direction. But it is the hope of all that the government will recognise the necessity of reflection on the serious consequences that it may bring upon agriculture, and will find a formula to

reconcile the interests of employers with those of workmen and with the supreme interests of the nation.

The considerations expressed in the various reports of the agricultural bodies may be divided into two orders of ideas, the first with regard to the technical, the second to the political side of agriculture.

It is in the first place pointed out that the spirit of a legal provision tending to limit the physical force that a healthy man can daily put forth, comes from the good rules of physico-biological economy laid down by modern scientists, who have generally studied the muscular strain of a man in a factory, as it is industry which in our modern civilisation requires the largest number of hands, but that field labour is generally performed amidst healthful surroundings and does not call for an equal and continuous intensity of effort. The health of the agricultural labourer is therefore not injured in the least if from him a longer day of labour is required than from a man in a workshop. The truth of this statement is known to all, since any one can see that an agriculturist, unlike a factory worker, preserves all his energies to an advanced age. Agricultural labour is of such a nature that it does not demand continuous effort for the whole year, and yet its duration is not an appreciable factor, because the return is not in proportion to the time employed in the work.

On the other hand we see in every report this idea dominant, that the institution of an eight hours day is not practicable in agriculture, because agricultural production is subject to natural laws which cannot be modified by the will of man, therefore the labour for that production cannot be subjected to laws conceived by the mind of man, but must adapt itself to those higher inexorable laws which the universe obeys.

The peculiarity of agricultural labour is that it must be performed at the right time, neither before nor after. Sometimes it requires the heat of the sun; sometimes the mild temperature of the dawn or sunset. Some things must be done in a few days; others demand assiduous care for the whole year. At one time it is necessary to hasten on account of atmospheric changes; at another to delay for the same reason. The times and seasons for work also depend upon climate, altitude, aspect, possibility of obtaining labour, conditions of transport, and other causes which cannot be enumerated. How, it is asked, can the fixed rule of eight hours of work be applied to such various necessities and opportunities? And if an effort were made to adapt the law to these various seasons and necessities, it could only be done by granting as many exemptions as there are varieties of produce, climate and seasons; it would be necessary to take into account a vast number of conditions, and grant further exemptions for each, to be again altered according to the variation of weather or production. Evidently this would cause such a confusion of regulations that it would be impossible

to exact rigorous obedience to them. Therefore why not leave complete liberty to the organisation of agricultural labour? But withal no one asserts that the conditions of the life of the agricultural labourer should not be the object of assiduous care on the part of the government. But it is desirable that the government, in assuming the direction of agricultural policy, should strictly observe those laws which transcend all human power, and rule perennially and inexorably. And if there is one law of agricultural policy which a sagacious and far-seeing government should constantly hold in the highest consideration, it is certainly this, to endeavour by every means to make the peasant love the land and to protect him from the allurements of city life. The constitution and development of agricultural undertakings of a family character should be especially favoured by making life in the fields more comfortable; and to make field labour more useful and productive, agricultural teaching must be extended and developed; and that agricultural teaching may not remain barren for want of means to apply the knowledge acquired, agricultural credit must be organised. And as produce must be transported with facility wherever the demand is greatest, means of communication and vehicles must be provided. Lest the produce should fall into the hands of unscrupulous dealers, intermediaries and speculators of all kinds, it is needful to provide for the organization on a large scale of co-operative institutions, for the establishment of store houses and of central markets. In short, instead of introducing new perplexities and limitations, every means must be adopted so that in the shortest possible time we may reach the equilibrium so long absent between production and consumption.

The eight hours limitation during this period of general scarcity is the more inopportune, because by diminishing the producing power of the labourer, and therefore diminishing production, its immediate result will be to increase the already exaggerated cost of commodities and to give rise to a legitimate demand on the part of the agricultural labourer for higher daily wages.

These and other arguments of secondary importance have been suggested by the various reports and petitions presented to political and administrative bodies by all the agricultural organizations on the occasion of the promulgation of the eight hours labour law; therefore we must conclude that this new law is deprecated by the generality of agriculturists, whether employers or labourers. And if the government will not revoke the decree, the hope is expressed that at least such modifications will be introduced with regard to its application to agriculture, that it may not be necessary to transform the whole of a time-honoured system of organization unless with the object of urging Spain on towards a higher destiny.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL
ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

GERMANY.

THE LAW REGARDING HOMESTEADS. *Frankfurter Zeitung*, No. 255. Frankfurt, 6 April 1920.

A bill regarding homesteads has been presented to the National Assembly. It is limited to the establishment of the new institution of the homestead from the legal point of view, excluding from its scope any regulations for procuring assistance, land or money, for the actual formation of small family holdings.

According to the fundamental regulations, only the Empire, the States, the communes and communal consortia may bestow small homesteads. The Supreme state authorities may also authorise other corporations for instance, insurance companies, colonising enterprises, etc. to create homesteads. Landed proprietors and commercial firms are forbidden to bestow homesteads on their workmen. Besides small agricultural holdings, small tracts of land for carrying on fishing, for mills, and other small industries, may also be comprised among small homesteads. Property which is utilised simply through payment of rent, does not constitute a small homestead. In the distribution of small homesteads preference must be given to the mutilated in war, to the widows of men fallen in the war, and to those who have the largest families. The supreme authority in individual States may issue regulations as to the extent of the small homestead.

The small homestead derives its special characteristics from the privileges and limitations provided for in the bill, and from the regulations determined by the maker of the homestead and by the authorities. A homestead may be constituted only from land not burdened by mortgage, or for which the rights of privilege of the homestead are recognised by all who are interested in the matter, in conformity with §880 of the Civil Code, and regularly registered. The contract by which the person creating the homestead obliges himself to transmit the ownership of a holding requires legal or notarial authentication.

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2. ESTABLISHMENT OF A LAND VALUATION OFFICE. — *Jahrbuch der Bodenreform*, vol. 16. Jena, 29 April 1920.

The Prussian government, by an order dated 20 November 1919, provided for the establishment of a Land Valuation Office for the purpose

of assisting those Ministers in whose province it is to carry out land valuations, and to be directly dependent on these ministers (§§ 1 and 2). The Ministers are the Minister of Agriculture, Domains and Forests, who will supervise the working of the new office; the Ministers of Justice, of Social Economy, of the Interior and of Finance (§ 6). The Land Valuation Office must, at the request of one of these ministers (1) assist in carrying out the law on land valuation, especially by fixing the fundamental principles of valuation, collecting the facts necessary to furnish a basis for valuation, and supervising the officials appointed to make valuations, especially those of provincial and district offices; (2) stimulate the organization of valuation; (3) give advice on the subject of valuation, if requested by the Minister of Agriculture, Domains, and Forests.

The Ministers may entrust to the Land Valuation Office other functions connected with land valuation. The Minister of Agriculture, Domains, and Forests may call upon the members of the Office to undertake special missions in connection with valuation.

3. COMPULSORY SALES OF AGRICULTURAL PROPERTY IN PRUSSIA FROM 1886 TO 1917 — *Jahrbuch der Bodenreform*, vol. 16, No. 1. Jena 29 April 1920.

From 1886 to 1917 the number of compulsory sales in Prussia of landed property chiefly devoted to agriculture and forestry, not including cases of dissolution of joint ownership and of division of inheritance, was as given below, with the corresponding areas:

TABLE I. — *Number of Compulsory Sales of Agricultural Property in Prussia from 1886 to 1917 with the Corresponding Areas.*

Years	Number of properties	Area in hectares
1886	2,979	110,063
1890	2,220	55,310
1895	1,834	67,259
1900	1,291	42,475
1905	963	21,027
1910	705	16,732
1911	713	15,394
1912	628	17,723
1913	728	17,298
1914	360	9,462
1915	418	14,238
1916	407	12,925
1917	275	8,233

This table shows that in 1914, the year of the beginning of the war, the number of sales diminished by one half as compared with the preceding year, and increased by about $\frac{1}{18}$ in 1915. In the following year there

was a slight diminution, 11 cases fewer. The year 1917 shows the lowest figures ascertained since these statistics were collected, both as regards the number of properties and their extent. The fall in the number of compulsory sales is undoubtedly connected with the amelioration of the condition of agriculturists, who during the war sold their produce to greater advantage and were consequently better able to meet their engagements. But it must not be forgotten that during this period they had to contend with serious difficulties in turning their property to the best account. The limitations introduced during the war regarding compulsory sale contributed to the diminution of the number of such sales.

During the whole period under consideration the number of agricultural properties sold under compulsion fell from 2,979 in 1886 to 275 in 1917, that is to 9.2 per cent, while the corresponding area was reduced from 110,063 hectares to 8,233 hectares, that is 7.5 per cent.

The number and area of the lands sold under compulsion, classified according to the size of the properties, are shown in the following table:

TABLE II. — *Compulsory Sales of Agricultural Property from 1900 to 1917, classified according to Size of Properties (Absolute Figures).*

Years		Size of properties						
		less than 2 hectares	from 2 to 5 hectares	from 5 to 20 hectares	from 20 to 50 hectares	from 50 to 100 hectares	from 100 to 200 hectares	200 hectares and up- wards
1900	Number	181	290	472	179	86	37	45
	Area	257	981	4,844	5,635	6,131	4,999	19,628
1905	Number	208	257	322	91	44	22	19
	Area	263	856	3,314	2,775	3,063	3,217	7,549
1910	Number	141	168	266	73	31	12	14
	Area	164	558	2,829	2,294	2,348	1,774	6,765
1911	Number	167	162	244	74	31	20	15
	Area	143	570	2,592	2,270	2,267	2,918	4,634
1912	Number	153	134	218	59	31	15	18
	Area	139	448	2,282	1,786	2,260	2,305	8,503
1913	Number	166	158	262	78	28	22	14
	Area	152	504	2,699	2,510	1,921	3,252	6,260
1914	Number	32	67	144	65	36	11	5
	Area	23	238	1,575	1,878	2,630	1,430	1,868
1915	Number	24	80	197	57	25	22	13
	Area	28	283	2,164	1,712	1,722	3,225	5,104
1916	Number	26	77	187	68	22	15	12
	Area	35	255	2,052	1,990	1,504	1,959	5,030
1917	Number	14	45	144	44	10	10	8
	Area	18	154	1,472	1,384	684	1,439	3,118

From this it appears that except for some variations there has been a gradual diminution in every category. The proportion of compulsory sales each year in each group of properties is shown clearly in the percentages given in the following table.

TABLE III. — *Compulsory Sales of Agricultural Property from 1900 to 1917, classified according to Size of Properties (Percentages).*

Years		Size of properties						
		less than 2 hectares	from 2 to 5 hectares	from 5 to 20 hectares	from 20 to 50 hectares	from 50 to 100 hectares	from 100 to 200 hectares	200 hectares and up- wards
1900	Number	14.1	22.5	36.0	13.9	6.7	2.9	3.5
	Area	0.6	2.3	11.4	13.3	14.4	11.8	46.2
1905	Number	21.6	26.7	33.4	9.4	4.6	2.3	2.0
	Area	1.3	4.0	15.8	13.2	14.6	15.3	35.9
1910	Number	20.0	23.8	37.7	10.4	4.4	1.7	2.0
	Area	1.0	3.3	16.9	13.7	17.0	10.6	40.4
1911	Number	23.4	22.7	34.2	10.4	4.3	2.8	2.1
	Area	0.9	3.7	10.8	14.7	14.7	19.0	30.1
1912	Number	24.4	28.3	34.7	9.4	4.9	2.4	2.9
	Area	0.8	2.5	12.9	10.1	12.8	13.0	48.0
1913	Number	22.8	27.7	36.0	10.7	3.8	3.0	1.9
	Area	0.9	3.9	15.6	14.5	11.1	18.8	36.2
1914	Number	8.9	18.6	40.0	18.1	10.0	3.1	1.4
	Area	0.2	2.5	16.3	19.5	27.3	14.8	19.4
1915	Number	5.7	19.1	47.1	13.6	6.0	5.3	3.1
	Area	0.2	2.0	15.3	12.0	12.1	22.7	35.8
1916	Number	6.4	18.9	45.9	16.7	5.7	3.7	2.9
	Area	0.3	2.0	16.0	15.5	11.7	15.3	39.1
1917	Number	5.1	16.4	52.4	16.0	3.6	3.6	2.9
	Area	0.2	1.8	11.9	16.8	7.9	17.5	37.9

Thus the properties of from 5 to 20 hectares, that is, generally speaking, those of medium size, show by far the largest proportion of compulsory sales. This is especially true of 1917, for of this group 144 compulsory sales had taken place, that is, 52.4 per cent of the total number of sales, a percentage exceeding that of all previous years. As to the total area sold, the first rank is taken by properties from 200 hectares and upwards, that is, the large properties, except in 1914, when the sales of properties of from 50 to 100 hectares were 27.2 per cent, the highest percentage reached in that year. The proportion attained by estates of 200 hectares and upwards in 1912 is very remarkable, since the area represents 48 per cent., nearly half of the total area sold compulsorily during the year.

If we add to the forced sales of which we have hitherto spoken those properties to the owners of which agriculture was only an accessory, and those sold because of dissolution of joint ownership or division of inheritance, we have the following figures :

TABLE IV. — *Number of Properties Utilized for Agriculture, and Sold Compulsorily from 1913 to 1917 with the Corresponding Areas.*

Years	Total number	Area in hectares
1913	2,318	22,342
1914	1,513	12,991
1915	1,026	16,757
1916	988	16,039
1917	674	10,209

As may be seen, the total number of sales is double or triple those of Table I, while the area is only slightly larger. It may be concluded that those properties for which agriculture is only an accessory are of small area. During 1917, the last year under consideration, they only averaged 5 hectares while the average area of properties utilized chiefly for agriculture and sold by compulsion was nearly 30 hectares.

The total number of compulsory sales also shows a great reduction during the period in question. The number of sales diminished by 1,644 from 1913 to 1917, that is 70.9 per cent, and the area of the property sold from 22,342 to 10,209 hectares, a diminution of 54.3 per cent.

MEXICO.

A SPECIAL OFFICE OF AGRICULTURAL STATISTICS. — *Boletín Oficial de la Secretaría de Agricultura y Fomento México*, May and June 1919

The necessity of ascertaining by statistical research the economic condition of agriculture in the Republic has led to the institution in Mexico of a special Section of Agricultural Statistics to form part of the General Department of Agriculture. The task entrusted to this important office may be thus summed up: preparation of estimates, based on the greatest number of available data, of the various agricultural products of the whole republic, geographical determination of the zones of production, researches to obtain data, and reports relating to the physical, chemical and agronomic conditions of the land under cultivation.

The Section of Agricultural Statistics is also to examine the question of transport, not only with a view to improving the various existing means of communication, but also to planning new roads in the different agricultural zones, in relation to the centres of consumption and the principal

markets. It is to collect particulars regarding the different railway tariffs for the carriage of goods, and compile fortnightly tables showing the average value of the various agricultural products according to the localities to which they belong, and the nearest markets.

To the Agricultural Section is committed the task of collecting statistics respecting stock farming and agriculture, for which it must periodically apply to the Agents of Agricultural Information and Propaganda, who, to the number of 1500 or more, are distributed throughout the Republic.

It will also have to consider the most practical form in which to institute the census of agriculture and of live stock, preparing agronomic charts, showing in detail and to scale the area of land under cultivation, or appropriated to other objects, fixing precisely the geographical distribution and the agronomic importance of the land. It is to follow annually with the utmost exactitude the fluctuations in the price of land under cultivation and specify the price per hectare and according to the quality of the land.

It is to prepare charts and special tables of statistics of live stock and of agriculture, indicating the number of head of stock in the different regions, the quality of such stock, the distribution of the produce, the various markets and quotations of produce according to season, to locality, etc.

URUGUAY.

THE INTENSIFICATION OF AGRICULTURE. *El Estanciero*, Montevideo, 31 March 1920.

A bill has been presented to the Chamber the object of which is the compulsory cultivation, not only by proprietors who directly manage their own land, but also by tenants or metayers, of a proportional part of the land which they possess or rent. For convenience the bill classifies the departments of the Republic in four groups, the first comprising the departments of Canelones, San José and Colonia, the second the departments of Soriano, Flores, Florida, Durazno, Minas and Maldonado; the third the departments of Rio Negro, Paysandu, Cerro Largo and Treinta y Tres, and the fourth the departments of Rocha, Salts, Artigas, Tacuarembó and Rivera.

In proportion to the area of the land comprised in each of these groups, the bill would fix the percentages which must be cultivated. These would be 6 per cent. for those holdings of the first group which exceed 500 hectares in extent; 4 per cent. for those of the second group exceeding 600 hectares; 3 per cent. for those of the third group exceeding 1000 hectares, and lastly, 2 per cent. for those of the last group exceeding 1000 hectares.

Thirty per cent. of land which, in all, must be destined to agriculture may be devoted to plantations of fruit trees, or forest trees, not less than 300 for every hectare cultivated.

Exemptions from the provisions of this bill are made for lands belonging to the last three groups when they are situated more than 60 kilometres from a railway station. If, however, there should be estates comprising an area exceeding 2000 hectares, a minimum of 40 hectares must be devoted to agriculture in whatever place the estates may be situated. So also are exempted those lands in which 15 per cent. of the area is not adapted to agriculture.

Proprietors who do not comply with the rules of this bill must submit to an increase of 5 per cent. for the first year, and 100 per cent. in the following years on the tax on real property. In their turn, they would have the right to recover the amount of the increase from tenants or their guarantors who should evade the provisions of the bill.

INTERNATIONAL QUESTIONS

1. FORMATION OF AN INTERNATIONAL INSTITUTE OF REFRIGERATION — *La Démocratie Nouvelle* Paris, 22 June 1920

In June 1915 the French government took the initiative in inviting the governments of states, dominions and colonies, regarded as likely soon to form part of the League of Nations, to participate in an international congress with a view to forming an official international organisation to investigate questions connected with refrigeration. Thirty-eight States were represented in Paris at the conference of the 15, 16 and 17 December 1919.

It was decided that the States should be classed according to their importance in different categories, that they should pay an annual contribution of 12,000, 9000, 6000, 4000, 2000 or 1000 francs, and should bind themselves for a period of ten years, with a tacit renewal from five years to five years. The International Institute of Refrigeration is to turn its attention to the following subjects: the obtaining of low temperatures, refrigerating plant, the industrial use of cold, transport, legislation, education, general economics, and statistics.

On 21 June 1920, the delegates of 42 governments of sovereign States, dominions and colonies signed a convention establishing in Paris the International Institute of Refrigeration, the cost of which is to be defrayed by the governments who were signatories.

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* *

2. MEETING OF THE INTERNATIONAL AGRICULTURAL COMMITTEE. — *Journal d'Agriculture pratique*. Paris, 17 June 1920.

The last meeting of the International Agricultural Committee was held in Paris in February 1914. It was then occupied with preparing the participation of Europe in the international congress which was to have

been held at the Universal Exhibition at San Francisco in 1915; names were being sent in by those who proposed to take part in the congress when the war broke out, and the work of the Committee was suspended.

The first session since the close of hostilities took place in Paris at the headquarters of the Academy of Agriculture, under the presidency of M. Méline, who has directed the work of the Committee for thirty years.

Belgium was represented by Messrs. Maenhaut and de Vuyst; the United States by Mr. Howard; France by Messrs. Méline, Emile Loubet, de Saint-Quentin, the Marquis de Vogüé, Sagnier, Tardy, P. Gervais, Lafosse, Rienl Paisant; Holland by the Baron Collot d'Excury and M. Verheggen; Switzerland by Dr. Ernest Laur. The greater number of delegates from other countries sent letters regretting their inability to attend the meeting but promising support to whatever resolutions might be adopted.

Proposals were made to the Committee to hold a meeting in Paris during the following spring, and having agreed to these, the Committee turned its attention to the question of its relations with the League of Nations. After some discussion, it was decided to communicate with the League of Nations, with a view to ascertaining the conditions under which the Committee might co-operate with it.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 ore) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	9 $\frac{33}{64}$ d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5 $\frac{5}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	9 $\frac{33}{64}$ d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753 $\frac{53}{64}$ d.	at par
1 Franc (100 centimes) (France)	=	9 $\frac{33}{64}$ d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $\frac{83}{64}$ d.	at par
1 Leu (100 statinki) (Bulgaria)	=	9 $\frac{33}{64}$ d.	at par
1 Lira (100 centesimi) (Italy)	=	9 $\frac{33}{64}$ d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	9 $\frac{33}{64}$ d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25.261 $\frac{61}{64}$ d.	at par
1 Milreis, gold (Portugal)	=	45.519 $\frac{19}{64}$ d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	9 $\frac{33}{64}$ d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137 $\frac{137}{64}$ d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	185.015 $\frac{15}{64}$ d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 $\frac{3}{8}$ d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$ of £1 (gold)	
1 Talari (20 piastre) (Egypt)	=	45.1 $\frac{1}{32}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037 $\frac{37}{64}$ d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

FRANCE.

THE CO-OPERATIVE ORGANIZATION
OF AN AGRICULTURAL REGION.

SOURCE:

ANGLADE (Maurice) : L'organisation économique et sociale d'une région agricole, dans le Compte rendu de la Semaine sociale de France, session de Metz 1919. *Chronique Sociale de France*, Lyon, 1920.

The district of the Central Plateau, which extends from the mountains of Auvergne to those of Rouergue and Gévaudan, and comprises the departments of Aveyron, Lozère, Cantal, and Puy-de-Dôme has suffered more than the rest of France from the scourge of a rural exodus. No less than 100,000 persons from the department of Aveyron alone have gone to reside in Paris, a considerable number if we remember that the population of this department does not exceed 350,000.

There are many causes for this emigration; fashion, opinion, instruction and education are all important factors in it; it may also be explained by the desire of gain, and the attraction of a large city. Lastly, before the war, many peasants emigrated from the Central Plateau because they could not do otherwise; they had neither capital nor land to cultivate, agricultural risks seemed to them too serious, and life in the country neither comfortable nor hygienic. To cope with this situation the Agricultural Associations of the Central Plateau were set on foot in a small commune of Aveyron, where in 1905 the first communal agricultural syndicate of this department was founded. Thence the movement extended to the

neighbouring communes, and later to the whole department, while in Lozère a similar work was in progress.

The Federation of the first Associations of Aveyron, Lozère, Cantal and Puy-de-Dôme has formed a Union of Syndicates, a regional fire insurance company, a regional credit bank, and a regional cattle insurance society, to which were afterwards added a land credit bank, a pension-fund, and two branch societies to insure a regular market for the agricultural produce of the region, also the Agricultural Society of Roquefort and the Society for the Exportation of Agricultural Produce from the Central Plateau. Besides these societies, the Union of Agricultural Associations of the Central Plateau was formed in order to centralize this movement, to maintain its spirit, and to serve as a bond of union among the various communal or district associations, of which at the present time there are about 400.

§ I. THE UNION OF AGRICULTURAL ASSOCIATIONS OF THE CENTRAL PLATEAU.

The Union of the Central Plateau aims at the material improvement of the farmers and agricultural labourers of the region while keeping them on the land by permitting them to obtain from the land they cultivate the maximum return with the minimum outlay and risk ; by making it easier for them to live under the best conditions possible, through the improvement of housing sanitation and labour contracts ; also through the suppression of unnecessary middlemen in purchasing requisites or selling produce, through a more judicious choice of markets and through turning produce to better account. It aims also at their moral improvement, by making them conscious of the part they must play, and of the nobility of their mission and the greatness of their task, by keeping them amidst surroundings favourable to ideas of order, labour and social peace, and by developing in their minds ideas of loyalty, justice, charity, solidarity, mutual aid, and reciprocal co-operation.

The Union rests upon the three following principles which it considers essential :

1. Communal decentralization with the agricultural syndicates as the basis of agricultural organization ;
2. Strong regional centralization ;
3. State intervention strictly reduced to a minimum, leaving larger scope to free initiative.

In the first place the commune is to the Union the normal framework within which agricultural organization must evolve ; in the commune men know one another and understand the needs of the labourers, and the means to be employed to satisfy them ; viz, technical teaching, insurance, assistance, and thrift to protect them against the risks that threaten them and to improve their position. But the communal syndicate, alone and isolat-

ed, would soon be powerless to render all the services expected from it, if it were not resting on a higher organization, having its headquarters in the region, which, like the commune, is a natural boundary, based on historical or economic reasons. The regional organization will centralize the agricultural movement within a wide radius ; it will inspect and control the communal organizations, will balance their risks, and will place at their disposal those general services which they cannot themselves furnish.

Lastly, the Union urges that State intervention should be reduced to the minimum which is absolutely necessary, lest private initiative should be discouraged and disappear.

The Union of Agricultural Associations⁵ of the Central Plateau comprises :

General services which it places at the disposal of its regional or communal institutions ;

Regional groups with the duty of centralizing the operations of the local societies and of ensuring their working ;

Branch societies for the purpose of developing the resources of the district.

The general services of the Union are: the Secretariat, the Legal Section, the Sanitation and Rural Buildings Section, the Commercial Section, the Transport Section and the Industrial Section.

The Secretariat carries on correspondence, issues propagandist literature and arranges for lectures. Every Sunday, in fact, an automobile carries lecturers to those communes of the district in which it is desired to set on foot some new enterprise, or give life to such as threaten to die out.

The Legal Section prepares rules and resolves the difficulties which might prevent the formation of communal organizations. It also verifies way-bills and taxation returns.

The Sanitation and Rural Buildings Section, under the direction of an architect, proposes to introduce better sanitation and more comfort into the country, and to improve farm buildings.

The commercial services are ensured by a regional co-operative society with many branches. At the head office are the Board of Management, the service of inspection and a central warehouse for provisioning dépôts on the railways and in the principal centres of the district. From the dépôt motor lorries are sent out to supply the syndicates within the radius. The profits of the co-operative society are divided into three parts: one passes to the reserve fund, one is divided amongst the purchasing syndicates, and the third is allocated to the Union of Agricultural Associations, considered as the representative of organized agriculture and of the whole agricultural interest.

The Transport Section arose from the necessity of supplying the communal syndicates, the district not being well supplied with railways.

The duty of the Industrial Section is to inquire into the economic resources of the country, and to see that all the wealth which might be profitable to agriculture is utilized.

§ 2. THE REGIONAL ORGANIZATIONS.

The regional organizations working under the inspiration and control of the Union of the Agricultural Associations are : the Union of Syndicates ; the Regional Fire Insurance Society ; the Regional Credit Bank ; the Land Credit Bank ; the Regional Cattle Insurance Society, and the Pension Fund.

The Union of Syndicates is chiefly occupied in supporting the communal syndicates in their work of protecting the general interests of agriculture. Thus for example, the affiliated syndicates have petitioned for the formation of Chambers of Agriculture, for the suppression of the requisition of crops, the obligation to declare them, and the fixing of prices for them. The Union, in their name, has petitioned that part of the railway material recovered from Germany should be placed at the disposal of agriculture and that agriculturists should be represented at the Peace Conference on the same footing as the General Confederation of Labour.

The Union of Syndicates seeks to develop to the fullest extent the work of the communal syndicates. Many of these have a particularly active life. Many are owners of implements, threshing machines, weighing machines, stills, presses ; many possess a motor lorry. One of them is at present occupied in utilizing the local water power for generating electricity for the use of the commune and for the working of a saw-mill, a starch factory and a flour mill.

The Regional Fire Insurance Society reinsures the risks spread over 206 communal mutual insurance societies at present reaching the sum of 65,000,000 fr. These mutual societies carry a part of the risks themselves, and reinsure the rest with the regional society, which in its turn reinsures part with the Central Society of French Agriculturists, in Paris. The affiliated mutual societies effect a saving of 35 per cent on the premiums paid to insurance companies ; they bring about a selection and supervision of risks, the result of which is a diminution in the losses of 30 per cent. as compared with the insurance companies.

The Regional Credit Bank centralizes the operations of the rural banks in which the liability of the members is unlimited. Independent of public authorities and existing only by its own resources, the Regional Credit Bank enjoys great liberty in its operations, which has permitted it, for instance, to open a credit of 700,000 francs in the Departmental Office of Supplies, for re-victualling the department. During the war its business transactions amounted to no less than 12,000,000 francs. At present, considering that the agriculturist is becoming more and more a manufacturer and a merchant, that a considerable amount of agricultural capital remains unproductive and unused during the time between the period of sale and the period of purchases, the Regional Credit Bank opens current accounts for agriculturists, for the purpose of putting into circulation considerable unemployed savings.

The Land Credit Bank has been formed to facilitate the acquisition of land by agricultural labourers. Although hampered in its working

by the rigidity of the Law of 1908 which authorizes loans solely for the purchase of land of one hectare in extent and of the value of 1,200 francs, it has been able to carry out some transactions which will in future be more extensive because of the larger facilities granted by the Law of 1916 to the mutilated in war.

The Regional Pension Fund has ensured during the war the payment of 1,154 pensions for a total amount of 440,023 francs; it has also lent more than 66 000 francs to three communes in the department of Aveyron.

These various regional societies have their offices in one building of which they are the owners.

§ 3. THE BRANCH SOCIETIES.

The branch societies are limited liability co-operative societies, formed with the object of intensifying the production of the country, and ensuring markets for the agricultural produce of the district.

Three societies of this kind are already working, or about to begin work; an Agricultural Society at Roquefort; a Society for the Exportation of the Agricultural Produce of the Central Plateau; a Society for the Supply of Manures and Building Materials required in Agriculture.

The Agricultural Society of Roquefort, with a capital of 1,000,000 fr. proposes to develop the dairy industry; it has instituted the sharing of profits among its employés, and has established savings banks and benefit societies for them, as well as giving special encouragement to shepherds mutilated in the war.

The Society for the Exportation of the Agricultural Produce of the Central Plateau has a capital of 800,000 fr. It is co-operative in form, and distributes the profits amongst the producers and the syndicates. It proposes to export fruit, poultry, and eggs, and especially to lower the price of butcher's meat by exporting dead meat instead of live cattle, and by utilizing to better profit the chief and minor products. The Central Plateau is known for the importance of its cattle raising. In the department of Aveyron alone more than a million animals, cattle and sheep, graze on the pastures of Levézou and Larzac, or on the high plateaux of Aubrac, and the numbers exported to the south or to Paris are considerable. In normal years the exportation registered in the three principal railway stations in the department alone was not less than 40,000 head of cattle. Now this exportation is carried on in the primitive and costly style, viz crowding into the trucks the live animals, exposing them to loss and waste on the journey through diminished weight. On a journey of 200 kilometres this waste often amounts to 10 per cent., which means that for an animal weighing 500 kilogrammes, 50 are lost between the farm and the abattoir, without profit for any one and to the injury of the consumer, who suffers from the consequence of this state of affairs through increased prices. Further the municipal abattoirs being badly equipped for the utilization of oil and other

minor products, much of these is lost, whereas if they were turned to account the net cost would be less.

The Society for the Exploitation of the Agricultural Produce of the Central Plateau has therefore undertaken to build an industrial abattoir with cold storage. This establishment, built on a tract of land of 10 hectares in extent, situated between a stream of water and the railway, and at two kilometres from the town of Rodez, is capable of receiving from 50 to 100 beasts per day. The refrigerating chambers permit of storing the meat and exporting it frozen at a temperature of -20°C . in proportion to the requirements of the centres of consumption.

To conclude this enumeration of the rural institutions of the Central Plateau we may mention three institutions not due to the initiative of the Union of Agricultural Associations of the Central Plateau, but working with its aid: a Home Industries Society, for making hand-tufted carpets; a Sanatorium for natives of Aveyron made anaemic by the climate of Paris, and a school of agriculture. We may add that in Lozère there is a workshop for making lace and another for making toys, both specialties of the department.

GERMANY.

AGRICULTURAL CO-OPERATION DURING THE WAR.

SOURCES.

JAHRBUCHER DES REICHESVERBANDES DER DEUTSCHEN LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN FÜR 1914, 1915, 1916, 1917 UND 1918. — Years 21, 22, 23, 24 and 25. Berlin. 1915, 1916, 1917, 1918, 1919

The war, which caused considerable transformations in the economic life of Germany, produced many changes in agricultural co-operation. The nature and import of these changes are shown in the account we are about to give, based upon recent statistics.

§ 1. GENERAL DEVELOPMENT OF AGRICULTURAL CO-OPERATION DURING THE WAR.

Scarcely had the war broken out when a large number of the members of societies were called to arms. Among the numerous members of German co-operative societies who were mobilized were several leaders of the co-operative movement. Those who remained behind were not only obliged to continue their usual work, but to undertake the tasks of those who had gone.

Thus there was a risk of a pause in the work of many co-operative societies. It was not a question of extending the movement by creating new societies, but of preserving those already in existence, and of continuing the work without impediment. By means of courses of instruction in co-operation among the wounded soldiers, instituted by the federations, of district meetings where many questions of co-operation connected with the war were discussed in public, and with the help of women, the absent members were to some extent replaced, and through the union of all forces, co-operative life succeeded not only in keeping up to its level, but even in extending itself after the first year of war, by constituting new societies.

By the most rigorous observance of the directions given by the federations, and the most accurate adaptations of their organization to the new economic conditions, the co-operative societies were enabled to show an increase on their pre-war numbers; all forms of agricultural co-operation were extended in varying proportion. It is however quite natural that they should not have succeeded in attaining the average increase of the period before the war, which amounted to about 1000 societies per annum. Thus :

The increase in		1909-10	was	946	co-operative societies		
»	»	»	1910-11	»	879	»	»
»	»	»	1911-12	»	1,302	»	»
»	»	»	1912-13	»	1,166	»	»
»	»	»	1913-14	»	1,126	»	»

During the war years the numerical increase of the co-operative societies was as follows :

In 1914-15 (it must be observed that the first year of the war does not coincide with the working year which extends from 1 June to 31 of the following May, and therefore includes only ten months of war) 388 co-operatives were formed and 151 dissolved; there was thus a net increase of 237 societies. Since in the two months of peace, June and July 1914, the increase was 118 societies and for the first year of the war, limited to ten months of the working year, the increase was only of 119 societies, we see that for ten months of war the result was the same as for two months of peace.

In the second year of the war there were 316 societies formed and 119 dissolved, a net increase of 197 societies in 1915-16.

In the third year of the war there were 457 new societies formed and 127 dissolved, an increase in 1916-17 of 330 societies.

And lastly in the fourth year of the war there were 659 societies formed and 168 dissolved, giving for 1917-18 an increase of 527 societies.

From August 1914 to 1 June 1918 (the last date for which we have figures) 1,173 new co-operative agricultural societies were formed or about as many as were formed in 1913-14 alone.

Compared with the pre-war period the progress of co-operative development undoubtedly slackened considerably; however, not only was there no backward movement, but even taking account of the altered circumstances and the altered possibilities of development, a considerable advance took place.

The whole number of agricultural co-operative societies in existence during the last year of peace, in 1913-14, and in the successive years of the war may be seen in Table I.

TABLE I. — *Number of Co-operative Societies.*

Years	Co-operative credit societies	Co-operative societies for purchase	Co-operative dairies	Other co-operative productive societies	Total
1913-14 . . .	17,696	2,809	3,572	4,241	28,318
1914-15 . . .	17,777	2,842	3,593	4,343	28,555
1915-16 . . .	17,864	2,912	3,601	4,375	28,752
1916-17 . . .	17,948	2,990	3,601	4,543	29,082
1917-18 . . .	18,199	3,126	3,593	4,691	29,609

As to the relation between the number of agricultural co-operative societies registered under the Law on Co-operative Societies, and the total number of societies in Germany so registered, Table II gives the figures for the last few years.

TABLE II. — *Relation between the Number of Agricultural Co-operative Societies and the Total Number of Registered Co-operative Societies.*

Date	Agricultural co-operative societies	Total number of registered co-operative societies	Percentage of agricultural co-operative societies with respect to the total number
1 June 1914 . . .	28,318	35,300	80
" 1915 . . .	28,555	35,600	80
" 1916 . . .	28,752	36,100	79
" 1917 . . .	29,082	36,800	79
" 1918 . . .	29,609	37,440	79

About four-fifths of all the co-operation in Germany is thus formed by co-operative societies which are agricultural or rural in character.

As to the form of liability of the agricultural co-operative societies, Table III shows the absolute number and the percentage of co-operative societies which during the war adopted each of the three forms of liability.

Table III shows a constant, if inconsiderable, tendency of co-operative societies towards the form of limited liability, a phenomenon observed as early as 1897. But the great majority of the societies, almost two-thirds, are based on the principle of unlimited liability, while the third form, those based on the liability to make unlimited supplementary payments, plays quite a subordinate part and the number has been stationary during the last few years.

TABLE III. — *Distribution of Co-operative Societies according to the Form of Liability Adopted.*

Date	Societies with unlimited liability		Societies with limited liability		Societies with obligation to make supplementary unlimited payments	
	Number	Percentage	Number	Percentage	Number	Percentage
1 June 1914 . . .	21,049	74.3	7,156	25.3	113	0.4
" 1915 . . .	21,109	73.9	7,333	25.7	113	0.4
" 1916 . . .	21,226	73.8	7,414	25.8	112	0.4
" 1917 . . .	21,320	73.3	7,649	26.3	113	0.4
" 1918 . . .	21,579	72.8	7,941	26.8	113	0.4

The number of members of agricultural co-operative societies rose from 2,500,000 in 1913-14 to 2,600,000 in 1914-15 and 1915-16, then to 2,800,000 in 1916-17 and lastly to 2,850,000 in the last year of the war 1917-18. If we compare the number of members with the number of farms in Germany, we shall see a large proportion of these still remain outside the co-operative movement. And since among the members there is a considerable number of non-agriculturists and labourers who are not independent, there is in Germany still a possibility of further development of agricultural co-operation.

§ 2. PROPORTION BETWEEN THE NUMBER OF SOCIETIES, THE TOTAL POPULATION AND THE AREA CULTIVATED.

With the object of indicating the economic and social importance of agricultural co-operation in the German Confederation and in its individual territories, and at the same time the degree to which the co-operative movement has penetrated into agriculture, we show in Table IV the proportion between the number of co-operative societies and the total population (as shown by the census of 1 December 1910) and also between the number of societies and the area cultivated (according to the calculation made in 1900).

As may be seen from Table IV, the changes from year to year have not been important. The comparison between different districts gives interesting results. The first part of the table shows that Waldeck with one society for an average of 921 inhabitants, has the highest number of agricultural co-operative societies in proportion to the population, while the lowest number in all Germany is in Hamburg, where the industrial population predominates largely over the agricultural, and there is an agricultural co-operative society only for every 50,733 inhabitants. Between these two extremes is a series of gradations.

The second part of the table, which shows the development of co-operation in proportion to the area cultivated, indicates that Bavaria on the

TABLE IV. — *Proportion between the Number of Societies
the Total Population and the Area Cultivated.*

Districts	One agricultural co-operative society for so many inhabitants on 1 June					One agricultural co-operative society for so many hectares of area cultivated on 1 June				
	1914	1915	1916	1917	1918	1914	1915	1916	1917	1918
East Prussia	3,276	3,251	3,255	3,251	3,266	4,309	4,275	4,254	4,248	4,264
West Prussia	3,058	3,056	3,064	3,060	3,102	3,138	3,138	3,113	3,130	3,149
Brandenburg	5,102	5,219	5,439	5,331	5,267	1,999	1,979	1,925	1,891	1,825
Pomerania	1,210	1,203	1,183	1,120	1,075	1,520	1,511	1,461	1,383	1,327
Posen	2,063	2,043	2,049	2,063	2,052	2,113	2,093	2,095	2,109	2,096
Silesia	2,241	2,219	2,208	2,188	2,116	1,137	1,126	1,112	1,102	1,065
Province of Saxony	2,370	2,360	2,349	2,342	2,326	1,392	1,383	1,364	1,360	1,348
Schleswig-Holstein	1,717	1,673	1,651	1,634	1,591	1,597	1,453	1,533	1,518	1,476
Hanover	1,861	1,832	1,780	1,734	1,702	1,359	1,387	1,303	1,270	1,246
Westphalia	4,064	4,036	4,032	3,974	3,884	1,211	1,202	1,214	1,196	1,167
Hesse Nassau	2,087	2,051	2,005	1,936	1,848	816	802	772	746	711
Rhenish Prussia	3,195	3,201	3,182	3,148	3,310	550	551	719	711	706
Hohenzollern	1,224	1,204	1,204	1,164	1,127	1,228	1,207	1,175	1,136	1,079
<i>Prussia</i>	<i>2,622</i>	<i>2,598</i>	<i>2,575</i>	<i>2,533</i>	<i>2,479</i>	<i>1,503</i>	<i>1,489</i>	<i>1,465</i>	<i>1,441</i>	<i>1,412</i>
Bavaria { right of Rhine . .	1,238	1,228	1,217	1,221	1,211	895	887	879	876	868
{ left of Rhine . . .	1,248	1,244	1,227	1,236	1,231	439	424	434	432	427
<i>Bavaria</i>	<i>1,239</i>	<i>1,230</i>	<i>1,227</i>	<i>1,223</i>	<i>1,196</i>	<i>833</i>	<i>827</i>	<i>819</i>	<i>817</i>	<i>811</i>
Kingdom of Saxony	8,918	8,692	8,676	8,861	8,537	1,907	1,859	1,850	1,847	1,817
Wurttemberg	1,341	1,332	1,324	1,320	1,314	685	680	669	667	662
Baden	1,333	1,304	1,303	1,296	1,277	531	519	505	5	497
Hesse	1,554	1,575	1,561	1,535	1,483	595	603	591	581	557
Mecklenburg-Schwern . . .	1,576	1,538	1,492	1,425	1,338	2,303	2,248	2,160	2,064	1,935
Mecklenburg-Strelitz . . .	2,314	2,318	2,265	2,172	1,835	3,659	3,659	3,617	3,469	2,896
Saxe-Weimar-Eisen	2,317	2,314	2,305	2,292	2,096	1,337	1,337	1,311	1,304	1,185
Oldenburg	1,175	1,193	1,200	1,187	1,169	876	888	1,003	1,000	981
Brunswick	1,772	1,772	1,765	1,765	1,741	830	833	813	813	795
Saxe-Meiningen	3,132	3,168	3,167	3,132	2,760	1,485	1,502	1,424	1,408	1,227
Saxe-Altenburg	3,486	3,486	3,431	3,377	3,431	1,439	1,439	1,410	1,388	1,381
Saxe-Coburg-Gotha	2,572	2,546	2,521	2,521	2,497	1,279	1,266	1,236	1,236	1,213
Anhalt	5,612	5,612	5,709	5,709	5,428	2,675	2,675	2,702	2,702	2,541
Schwarzburg-Sondershausen	2,306	2,366	2,366	2,366	2,366	1,368	1,405	1,400	1,400	1,400
Schwarzburg-Rudolstadt . .	2,767	2,582	2,518	2,518	2,142	1,319	1,218	1,165	1,165	957
Waldeck	921	921	921	921	921	951	951	936	936	936
Reuss, Elder Branch	909	9,096	8,085	8,085	6,615	2,325	2,325	2,067	2,067	1,636
Reuss, Younger Branch . . .	8,486	8,486	8,486	8,486	8,486	2,683	2,683	2,683	2,683	2,683
Schaumburg-Lippe	4,665	4,665	4,665	4,665	4,665	2,240	2,240	2,220	2,220	2,220
Lippe	4,312	4,312	4,312	4,312	4,312	2,350	2,380	2,380	2,380	2,380
Lubeck	10,600	10,600	10,600	10,600	10,600	1,882	1,882	1,836	1,836	1,836
Bremen	42,789	37,440	37,441	33,281	33,281	2,982	2,612	2,488	2,211	2,211
Hamburg	48,317	48,317	48,317	50,733	50,733	1,438	1,438	1,233	1,295	1,295
Alsace-Lorraine	4,414	2,434	2,434	2,434	2,456	1,209	1,199	1,207	1,207	1,216
<i>Germany</i>	<i>2,293</i>	<i>2,274</i>	<i>2,258</i>	<i>2,232</i>	<i>2,192</i>	<i>1,238</i>	<i>1,279</i>	<i>1,211</i>	<i>1,197</i>	<i>1,175</i>

left of the Rhine (the Palatinate) where there is a society for every 427 hectares, is pre-eminent in this respect, while East Prussia, where large estates are numerous, is lowest of all with a society for every 4,264 hectares. During the last few years there has been little or no change in the situation as regards agricultural co-operative societies in the various districts. For the whole of Germany, as the number of societies is increasing, the average extent of cultivated land per society slowly tends to diminish; from 1,238 hectares on 1 June 1914 the average area had fallen to 1,175 hectares on 1 June 1918.

§ 3. THE FEDERATIONS OF AGRICULTURAL CO-OPERATIVE SOCIETIES.

The agricultural co-operative societies are nearly all grouped in agricultural federations. During the war a strong and increasing tendency was observed among isolated societies to become affiliated to the various federations. Of the 28,318 agricultural co-operative societies then in existence, 26,315 were on 1 June 1914 affiliated to federations, that is, 93 per cent.; on 1 June 1915, 26,462 out of 28,555, that is, 92.6 per cent.; on 1 June 1916, 26,634 out of 28,782, or 92.6 per cent.; on 1 June 1917, 27,047 out of 29,082, or 93 per cent, and lastly on 1 June 1918 out of a total number of 29,609 societies, 27,587 were affiliated to federations, that is 93.17 per cent. In the first year of the war there was a retrogression, though only an insignificant one; the percentage went down from 93 per cent. on 1 June 1914 to 92.6 on 1 June 1915. In the following years there was constant improvement in this respect, especially because the newly formed societies were for the most part established by the existing federations or in connection with them.

The great majority of the agricultural co-operative societies is affiliated to the National Federation of German Agricultural Co-operative Societies (*Reichsverband der deutschen landwirtschaftlichen Genossenschaften*).

To it belonged :

On 1 June 1914 :	16,231 societies out of 28,318		
» » 1915 :	16,734 » »	28,555	
» » 1916 :	18,893 » »	28,782	
» » 1917 :	19,169 » »	29,082	
» » 1918 :	19,411 » »	29,609	

In the four years of war the number of societies belonging to the National Federation was thus increased by 3,210. The National Federation is constituted by the union of 31 autonomous state and provincial federations, which are all, except the Regional Federation of Local Agricultural Societies (*Landesverband der landwirtschaftlichen Kreisvereine*) in Alsace-Lorraine and the Federation of Co-operative Societies of German South-West Africa (*Deutsch-Südwestafrikanischer Genossenschaftsverband*) in Windhuk, federations with power of inspection (*Revisionsverbände*) in accordance with the German Law on Co-operative Societies. The agricultural co-oper-

ative societies not belonging to the National Federation were divided on 1 June 1918 among the following twelve large and small federations (by way of comparison we give in parentheses the number of affiliated societies on 1 June 1914): —

(1) General Federation of the German Raiffeisen Co-operative Societies, in Berlin, with 15 federations and 6,010 societies (13 federations with 5,610 societies).

(2) Agricultural Federation for Inspection of the Bavarian Peasants' Union, in Ratisbon, with 760 societies (653 societies)

(3) Co-operative Federation of the Baden Peasants' Union, in Freiburg, with 418 societies (389 societies).

(4) Federation for Inspection of the Agriculturists' Union, in Berlin, with 396 societies (408 societies).

(5) Federation of Loan Banks of Central Franconia and of other Co-operative societies, in Ansbach, with 265 societies (219 societies).

(6) Federation of Dairies for West Holstein, in Hohewestedt, with 133 societies (129 societies).

(7) Federation for Inspection of Dairies for the Provinces of Brandenburg, Pomerania, Saxony and the Grand Duchy of Mecklenburg, in Prenzlau, with 66 societies (70 societies).

(8) Federation of Co-operative Societies for Purchase and Production of Upper Hesse, in Giessen, with 40 societies (43 societies).

(9) Federation of Agricultural Co-operative Societies in the Government District of Hildesheim with 31 societies (the same number).

(10) Federation of Co-operative Societies of East Prussia, in Königsberg, with 17 societies.

(11) Co-operative Federation of Middle Rhine, in Coblenz, with 22 societies.

(12) Federation for Inspection of Dairies for the Principality of Ratzeburg with 5 societies.

§ 4. LEGISLATION WITH REGARD TO AGRICULTURAL CO-OPERATION.

In order to adapt the management of co-operative societies to war conditions, and to facilitate their economic and financial development, a series of ordinances and laws was promulgated during the war containing new rules, or modifications of those already in existence. Immediately after the outbreak of hostilities, 8 August 1914, notification was given by the Federal Council that the provisions of §§ 99, 118, 142 and 148 of the Law on Co-operation were abrogated in so far as they related to the obligation to begin bankruptcy proceedings in the case of insolvency of a co-operative society, and to the prohibition to effect payments after the beginning of insolvency. On 8 September 1914 a notification relating to § 53 of the Law on Co-operation was issued, prolonging for four months the period within which the organization of registered co-operative societies or the conduct of their affairs should be submitted to inspection.

By the law on the war tax of 24 December 1915, the co-operative societies which could show an extra profit during the war years of at least 5,000 marks were, with other legally recognised bodies, obliged to form a special fund for the war tax and to present at a certain date a statement on which to base the calculation of profits.

On 1 October 1916 a law came into force by which a tax was imposed on the circulation of goods. It was intended, unlike the war tax, to furnish to the Treasury a permanent resource.

The Law on Auxiliary War Service (*Überlandischer Hilfsdienst*) of 5 December 1916 and 13 November 1917 was of great importance to the agricultural co-operative societies.

By this law, for the duration of the war, compulsory civilian service was introduced for all men from sixteen to sixty years of age. This civilian army was to assist the combatants at the front by supplying them with arms and provisions. The agricultural co-operative societies, especially the co-operative credit societies, were considered indispensable to the economy of the war and were treated as auxiliary services. Thus there were no special limitations on the activity of the co-operative societies as at first was feared. In Bavaria and Württemberg the co-operative societies were unconditionally considered as auxiliary services to the national defence, but in other territories it was for the War Office (*Kriegsamt*) to decide whether or not they could be so regarded.

The economic legislation which influenced the commercial activity of the co-operative societies comprised regulations as to the traffic in bread, stuffs, barley oats and forage, the sale of dried potatoes and the manufacture of potato starch, as well as the fixing of the maximum prices for all kinds of agricultural produce. At the Office of War Supplies (*Kriegsernährungsamt*) which supervised the whole system of national provisioning, the agricultural co-operative societies were represented. The whole co-operative organization was placed under the control of the Office of National Economy (*Reichswirtschaftsamt*) instituted on 1 October 1917, to which was entrusted the whole economic and social policy previously under the direction of the Office of the Interior (*Reichsamt des Innern*). The enormous mass of ordinances issued by the authorities, following one another in a short space of time, caused great embarrassment to agriculturists in carrying on their work. It is chiefly due to the methodical instruction given by the co-operative societies on the subject of collective trade, of combining individual interests with and subordinating them to the general interest, that these ordinances were nevertheless quickly understood.

§ 5. CONTRIBUTION OF AGRICULTURAL CO-OPERATIVE SOCIETIES TO WAR ECONOMY.

Local Societies.—The contribution of agricultural co-operative societies to war economy was not the same from local as from central societies. Of the assistance of the first, the offices within whose sphere the matter lay

do not seem to have availed themselves as much as might have been expected considering the good working of the co-operative organization. By degrees, however, the work of the co-operative societies made itself felt in various States of the Confederation, and in several provinces of Prussia, — Bavaria, Hesse, Thuringen, Baden, the Kingdom of Saxony, the provinces of Pomerania, Saxony, Silesia — but in many territories local agricultural co-operative societies were never formally utilized for carrying out according to established rules the supplying of the army and the provisioning of the nation.

To justify the insufficient utilization of local co-operative societies the unequal distribution of societies throughout the country was among other things adduced ; also the impossibility of a one-sided preference with regard to commerce. The position taken on this subject by the co-operative organizations may be summed up in a resolution passed unanimously in the second war meeting of the German agricultural co-operative societies held on 8 November 1917, in which it is stated: " We can find no solid argument to justify the exclusion of co-operative societies from the war economy. On the contrary the central co-operative societies for purchase and sale, and the local societies in their character of independent societies of producers are the organizations naturally to be called upon to lend their aid in the supply of agricultural requisites and of agricultural produce. It is therefore to be expected that in so far as this has hitherto not been done, the agricultural co-operative societies will now be adequately taken into consideration with regard to war economy. "

Central Banks.— The collaboration of the central societies for purchase and sale was taken advantage of to a great extent. As to the central banks, their principal contribution to war economy was in promoting subscriptions to the war loans. The influx of considerable sums of money, which began three weeks after the beginning of the war, enabled the central banks to participate largely in subscriptions to the loans, and contributed much to strengthen the economic mobilization of Germany during the war period. Table V shows the amount of the subscriptions to the war loans by the central banks of the great agricultural federations.

These totals show in what proportion the rural population shared in the purchase of war loans, and the result, increasing from loan to loan, of the propaganda carried on by the Federations. In order to enable the poorer people to share, even with very small sums, in the subscription, many co-operative societies instituted war savings books.

To subscribe to the war loan proved a good opportunity of investment to the central banks, as otherwise it would not have been easy to invest adequately the great influx of money from the co-operative credit societies.

The central banks also undertook the collection of gold for the Imperial Bank, chiefly by continued effort among the affiliated societies. It was not so much the collection of coined money among the societies, for this had generally been paid into the nearest post-office, but the gathering together of gold ornaments. The central banks organized and conducted energetically an effort to prevent the hoarding of gold.

TABLE V. - *Subscriptions to War Loans by Co-operative Agricultural Federations (in millions of marks).*

Federations	War loans								Total for the 8 war loans
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	
National Federation of Agricultural Co-operative Societies .	23.52	202.21	310.78	445.34	376.75	580.83	508.61	672.78	3,120.82
General Federation of Riffeisen Co-operative Societies in Germany.	10.00	45.00	85.00	127.00	96.50	162.50	133.50	192.50	852 0
Co-operative Federation of the Baden Peasants' Union	0 03	0.50	0.80	0.85	0.57	1.02	1.03	1.55	6.35
Agricultural Federation for Inspection of the Bavaria Peasants' Union	0.60	3.00	4.00	9.50	5.00	11.01	8.50	12.60	54.21
Federation for Inspection of the Agriculturists' Union	0.80	2.19	3.70	4.50	4.50	6.06	3.70	7.12	32.57
TOTAL . . .	34.95	252 90	404.28	587.19	483.32	761.42	655.34	886.55	4,065.95

With regard to supplying the army and provisioning the population, the central banks placed their funds at the disposal of co-operative societies for purchase and sale, of communal federations, of credit banks, etc.

Nearly all the central banks exerted themselves considerably in this way, but notably the Bavarian Central Bank of Munich. The central banks also laboured successfully, conjointly with the federations, to diffuse mutual insurance.

Central Co-operative Societies for Purchase and Sale. — The share taken by the central co-operative societies for purchase and sale in the war economy when the free sale of agricultural produce was limited by State intervention, was (1) supplying food to the army and navy; (2) supplying food to the civil population; and (3) supplying agricultural requisites to agriculture. We now describe briefly each of these functions.

I. The supplies furnished to the army and navy by the central co-operative societies were chiefly oats, bread stuffs, flour, hay and straw. In

some places there were old connections between the co-operative societies and the military commissariats, especially in Bavaria; in others such connections were formed at once at the beginning of the war, and continued until the establishment of the Central Office (*Zentralstelle*) for provisioning the army. By this office centres were established in every State of the Federation through which all purchases of army supplies were to be effected. The central co-operative societies continued their labours by aiding these centres in their purchases, for instance, at Wiesbaden, Bonn, Berlin, Cologne and Munich. The central co-operative societies of Posen had a large share in provisioning the fortress of Posen. The central co-operative societies of Hanover and Oldenburg were occupied in provisioning the navy with cattle. In Hanover, through the Chamber of Agriculture, they also provided pigs, in the sense that they undertook to supply 160,000 pigs, on the condition that 2 $\frac{1}{2}$ quintals of feeding stuffs per head were assigned to them.

2. Supplying the people with bread stuffs was carried out by central co-operative societies on the largest scale in Bavaria. Inasmuch as the central co-operative societies of Bavaria had undertaken the management of affairs connected with the cereal production of 1914 by means of free contracts with the communal federations, they bound themselves to furnish these federations with the necessary capital at 5 per cent, without taking account of other expenses. This business consisted chiefly in the purchase of bread stuffs, in the storage and care of this grain, in distributing the grain and the flour made from it to consumers belonging to communal federations, and in forwarding them to communal, rural, and city federations which needed it. The work of these co-operative societies in Bavaria in the sphere of war economy may be seen in their report for the year 1917-18. We read among other things: "In the year in question other communal federations hitherto doing business on their own account have handed over their affairs to us on commission, so that we now represent in all 58 communal federations. As agents of the provincial grain office we have purchased in the course of the year 932,000 half quintals of barley, and we have consigned them according to the instructions of that office. Even in 1917 our warehouses were almost exclusively at the service of the communal federations. In the same year six warehouses were purchased; we rent the newly constructed storehouse in Eichendorf (Lower Bavaria) and seven new buildings have been completed and are now used as warehouses. We are building three new warehouses. We are also negotiating, and at the moment of drawing up this report, the purchase has already been carried out, of various warehouses already completed, or of land in various localities and near railway stations." In general the co-operative contribution towards the supplying of bread was by placing the services of the societies at the disposal first of the *Kriegs-Getreide-Gesellschaft*, established on 25 January 1915, and afterwards of the *Reichsgetreidestelle* established on 10 June of the same year.

To regulate the supply of potatoes the *Reichskartoffelstelle* was instituted in the autumn of 1915 by order of the Federal Council, and the commer-

cial duties connected with it devolved upon a commercial section, the *Kartoffelversorgung Ges. m. l. H.* Then followed a new organisation by order of the Federal Council of 7 February 1916, which decided as to the cultivation, consignment and compulsory requisition of produce. Thus in the territories concerned the constitution of state or provincial *Kartoffelstellen* took place, and the management of the stocks existing in single administrative districts was handed over to the communal federations.

The central co-operative societies gave their aid by participating in the *Kartoffelversorgung m. b. H.* and, according to local conditions, by acting on commission for this and for single communal federations, and by co-operating with the centres for the purchase and distribution of potatoes (*Beschaffungs- und Verteilungsstellen*). This work, during the first two years of the war, was largely carried on by the central co-operative societies of Stettin, Hanover, Munich, Stuttgart, Darmstadt, etc.

With regard to the meat supply, the central co-operative societies concluded contracts with the government for raising and fattening stock. As already pointed out, these contracts were for the consignment of feeding stuffs to the breeders of pigs, in return for the obligation to fatten the animals up to a certain weight and to deliver them to be slaughtered. For animals fattened above the fixed weight rewards were given. The task of supplying the feeding stuffs was entrusted to the central co-operative societies. They undertook the supply at the conclusion of the contract, and they arranged for collecting and delivering the fattened animals. The Central Co-operative Society for the Cattle Trade (*Zentral Genossenschaft für Viehverwertung G. m. b. H.*) of Hanover makes the following statement on the subject: "Up to the 31 December 1915 we have furnished 63,608 cattle, 238,292 pigs and 54,394 sheep for a value of 77.6 millions of marks. In 1916 a contract was made for supplying pigs to various cities of the industrial region. A third contract for the industrial zones is now being carried out. The supplies furnished by the central co-operative societies are chiefly intended for the military administration, but pigs have been also consigned to several administrations of urban centres. Besides all this the central co-operative society was entrusted with the importation of 2,000 head of Danish cattle for the province." Similarly the *Pommersche landwirtschaftliche Hauptgenossenschaft* was engaged to supply meat to Pomerania; the *Pommersche Viehverwertungsbund* to distribute fodder, and to undertake the commercial part in carrying out contracts, and the *Pommersche Landesgenossenschaftskasse* to supply the necessary capital. The whole co-operative organization was utilized to complete large supply contracts. In Posen and Silesia societies were formed for this purpose. In Posen the *Gesellschaft zur Beschaffung von Fetteiweiss*, in which, among others, the *Verband landwirtschaftlicher Genossenschaften für die Provinz Posen* and the *Deutsches Lagerhaus G. m. b. H.* participated, was specially formed and in Silesia the *Kriegsschwein G. m. b. H.* with which the three agricultural co-operative federations of Silesia were associated.

For supplying butter and eggs (for instance, in Baden, Oldenburg and

Pomerania) there was no special action taken by the central co-operatives, but it formed part of the general co-operative work.

For the supply of agricultural requisites, the contribution of the central co-operative societies was the distribution of fodder, seed, sulphate of copper and sulphur. The part they played in the distribution of fodder and feeding stuffs was particularly noteworthy.

By an ordinance of 23 July 1915 a new institution, the *Reichsfuttermittelstelle*, for the distribution of forage was placed at the head of the whole organization. The managers of the provincial central societies were empowered to open offices for the distribution of forage (*Futtermittelverteilungsstellen*) whose duty it was to see that in their own district there was a supply of forage, and to distribute it. The final distribution was the duty of the communal federations. In many states of the Confederation and in many provinces of Prussia such centres of distribution were established. They were official institutions, which in their turn had need for the conduct of their business of a commercial organization. Such an organization was that of the central co-operative societies, and their work was utilized in a large number of districts for all the commercial work of the centres of distribution. Thus the *Brandenburgische Landwirtschaftliche Zentral Bezug- und Abgesatzgenossenschaft* of Berlin undertook the affairs of the centre for distribution of forage (*Futtermittelverteilungsstelle*) for the province of Brandenburg, the *Hauptgenossenschaft* of Stettin did the same work for the centre of the province of Pomerania, the *Deutsche Lagerhaus* of Posen for the provincial centre of Posen, the *Zentralgenossenschaft* of Halle for the centre of the province of Saxony. The same thing took place in Hanover, Munster, Dresden, Stuttgart, Karlsruhe, Darmstadt, and Oldenburg. At Strasburg all the distribution of forage and bran was entrusted to the *Landesverband der landwirtschaftlichen Kreisvereine*.

In Silesia, the Rhine province, and Bavaria, societies were constituted for this purpose. In Silesia a *Provinzial Futtermittelverteilungstelle für Schlesien* was established, of which among others the *Landwirtschaftliche Ein- und Verkaufsgenossenschaft*, of Breslau, and the *Landwirtschaftliche Zentral Ein- und Verkaufsgenossenschaft*, also of Breslau formed part. To the first of these central co-operative societies above mentioned was entrusted also the distribution of the forage of sixteen communal federations, to the second that of two. In the Rhine province the distribution of forage in the government district of Cologne was placed in the hands of the *Bezugskommission für Rheinpreussen*, of Bonn, and of the *Haupt Bezugs- und Absatzgenossenschaft* of Cologne. For Bavaria, the Bavarian Agricultural Council (*Bayerischer Landwirtschaftsrat*) instituted a *Landesverteilungsstelle für Futtermittel*, joined according to the new regulation by the *Bayerische Futtermittelverteilung G. m. b. H.* The *Bayerische Zentral-Darlehnskasse* of Munich participated by a payment of 200,000 marks. It also undertook the commercial part of the centre for the distribution of hay (*Heuverteilungsstelle*) instituted by the military authorities and intended to regulate the distribution of the hay throughout Bavaria, both for military purchasing offices, and for private owners of animals.

The distribution of sulphate of copper and of sulphur, so important as preventives against disease in vines, was undertaken in Württemberg by the *Verband Landwirtschaftlicher Genossenschaften* of Stuttgart, in Alsace-Lorraine by the *Landesverband der landwirtschaftlichen Kreisvereine* and in the Palatinate by the *Zentralgenossenschaft* of Neustadt. The purchase and distribution of seed of cereals, maize, flax, and potatoes was carried on by the central co-operative societies of Insterburg, Halle, Hanover, Dresden, Darmstadt, etc.

These varied labours connected with war economy gave occasion to the central co-operative societies, in their common anxiety to ensure the food supply of the country and to furnish the army with all that it required, to put themselves in touch with agricultural elements not yet formed into co-operative societies, and with the consumers of the cities, and thus to carry on a most effective work of propaganda.

* * *

In considering the general course of the agricultural co-operative societies during the war, we may indeed see a slackened development in regard to numbers, compared with pre-war times, but we perceive on the other hand an important development in regard to quality, a constant expansion of the field of their labours and a continually increasing participation in the whole war economy of the country. The manner in which these characteristic tendencies have been manifested during the war in local co-operative societies (credit societies, societies for purchase and sale, co-operative dairies, stock-breeding societies, etc) will be dealt with in a series of articles to be published successively in future issues.

Part II: Insurance and Thrift

ITALY.

THE REGULATIONS FOR COMPULSORY INSURANCE AGAINST INVALIDITY AND OLD AGE.

SOURCES (OFFICIAL):

DECRETO-LEGGE L'UOGOFENENZIALE 21 APRILE 1919, NO. 603, CONCERNENTE L'ASSICURAZIONE CONTRO L'INVALIDITÀ E LA VECCHIAIA PER LE PERSONE DI AMBO I SESSI CHE PRESTANO L'OPERA LORO ALLE DIPENDENZE DI ALTRI. *Gazzetta Ufficiale del Regno d'Italia*, NO. 104. Rome, 1 May 1919.

R. DECRETO 19 FEBBRAIO 1920, NO. 245, CHE APPROVA IL REGOLAMENTO PER L'ESECUZIONE DEL DECRETO-LEGGE SOPRA CITATO. *Gazzetta Ufficiale del Regno d'Italia*, NO. 74. Rome, 29 March 1920.

CIRCOLARE 31 MARZO 1920 DEL MINISTERO PER L'INDUSTRIA, IL COMMERCIO E IL LAVORO, DIREZIONE GENERALE DEL LAVORO E DELLA PREVIDENZA SOCIALE) CONCERNENTE CHIARIMENTI ED ISTRUZIONI INTORNO AD ALCUNE DISPOSIZIONI DEL DECRETO LEGGE 21 APRILE 1919, NO. 503, E DEL REGOLAMENTO APPROVATO CON R. DECRETO 29 FEBBRAIO 1920, NO. 245.

In Italy on 1 July last, compulsory insurance against invalidity and old age came into force by the Decree of 21 April 1919, No. 603, of which we stated the fundamental principles in our issue of November-December 1919. From this important measure, which responds to wishes repeatedly expressed by labour organisations, benefit will be derived by about 10 millions of artisans, peasants and private employés, who may obtain pensions equal to two thirds of their last wages. The system adopted is that of a triple contribution: the working classes and the employers of labour make contributions together equal to about 2 per cent of the wages, while the State assumes a burden which will amount to not less than 150,000,000 lire per annum. The provisions of the law having been completed by the regulations sanctioned by the Decree of 29 February 1920, No. 245, we can now give fuller information on the subject, especially as regards agriculturists, to whom a special chapter is devoted in the regulations.

§ 1. PERSONS COMPULSORILY INSURED AND THE AMOUNT OF THEIR CONTRIBUTIONS.

The chief object of compulsory insurance is the assignment of pensions in cases of invalidity or old age, and its secondary objects are grants of temporary monthly allowances to widows or orphans of insured persons,

and the prevention and cure of invalidity. Insurance is compulsory for all persons of either sex who have passed the age of 15 and have not reached 65, and who work for others in the following capacities :

(1) artisans, errand boys, apprentices, servants, assistants, clerks, overseers and employes in industry, commerce and agriculture, including hunting and fishing, public services, the liberal professions, and those who work at home for others : (2) domestics and persons employed in private service of any kind.

Those also are subject to compulsory insurance who give their work only occasionally and at intervals, exclusive of those who give work without remuneration. Agriculturists who work as metayers or tenants, when the annual profit they derive from the land they hold either as metayers or tenants does not exceed 3,600 lire, are also subject to the same obligation.

Employés are exempt if they receive a salary exceeding 350 lire per month.

There are three contributors to insurance ; labourers, employers of labour, and the State. According to the definition in the regulations, employers of labour are those who, by means of remuneration, engage persons to do work on their account by the day or as piece work, or in any other way. Those are also considered employers of labour who undertake work for others as contractors or sub-contractors.

The tenant, though compulsorily insured, is nevertheless an employer of labour as regards those persons outside his own family, employed in necessary work for the farm. The proprietor, tenant in emphyteusis or usufructuary or if the farm is leased the leaseholder are considered employers of labour with regard to the metayer who, in his turn is the employer of those engaged by him outside his family for work required on the farm.

Co-operative societies are also employers with regard to their members whom they employ on works which they have undertaken.

The contributions, usually collected by means of fortnightly stamps to be placed on personal insurance-cards, are fixed in relation to the remuneration received by the insured person in the following proportion.

Daily earnings	Fortnightly contribution	
	to be paid by the person insured	to be paid by the employer
	Liras	Liras
Up to 2 liras	0.50	0.50
Between 2 and 4 liras	1.00	1.00
» 4 and 6 "	1.50	1.50
» 6 and 8 "	2.00	2.00
» 8 and 10 "	2.50	2.50
Over 10 liras	3.00	3.00

By earnings is understood all that is paid for work done. It comprises, therefore, money accessory to wages or salary, such as sums given as prizes, gratuities, interest in the business, provisions or indemnity, when they

are not intended as reimbursement of expenses, nor as a gratuity given for once only, but are a usual form of remuneration. Earnings do not include a share of profits, nor an indemnity for the cost of living.

From the payments for piece-work must be deducted the cost of tools and other expenses which fall on the piece-worker according to the contract under which he is working.

If earnings consist wholly or in part of lodging and food or other similar benefit the amount must be fixed according to local prices. Food and lodging are not, however, considered as earnings if not given in payment for work.

§ 2. SPECIAL RULES FOR FARM LABOURERS.

In the decree above, quoted the difficulties and inconveniences of its provisions are justly taken into consideration, for though they are adapted in general to those who individually and with a certain continuity, or at regular periods, work by the day or by the piece, it is otherwise when they are applied to metayers or other produce-sharing tenants, to tenant-farmers, or to farm labourers. In the case of produce-sharing or other tenants the collective work of the family is substituted for individual labour. All the members of the family work, but it is difficult to determine the duration of the work and the payment due to each; and if from each one the same contribution were exacted as from other labourers, it would be an excessive burden on the family resources. The characteristic of the agricultural labourer is instability; today he works for one employer, to-morrow for another. He remains with one employer for a longer or shorter period of time, but always relatively short.

Owing to these considerations, the decree has fixed special rules for farm labourers and their families as regards compulsory insurance, earnings and the amount of the contribution.

The contribution for the members of the families of produce-sharing or other tenants is fixed at the following rates: for every man of 20 years of age but under 65, 24 liras per annum; for every woman within the same limits of age, 18 liras per annum; for persons of either sex from 15 to 20 years of age, 12 liras per annum.

These contributions are to be paid half by the proprietor and half by the tenant.

The amount is calculated for families of produce-sharing and other tenants for each agricultural year. The amount is fixed at the end of the agricultural year having regard to the composition of the family and the age of its individual members.

The contribution at the rate above specified is only due from those members of the family who habitually give manual labour on the farm.

Members of the farmer's family are not obliged to pay this contribution if they have other occupations, principal or accessory, for which they have already paid compulsory insurance for at least six months.

A special insurance card may be issued for the families of tenant farmers, valid for one agricultural year.

For day labourers, daily, weekly and fortnightly stamps are issued, of the following values :

	Value of the stamps		
	daily	weekly	fortnightly
	Liras	Liras	Liras
For every man above 20 years of age . .	0.20	1.20	2.40
For persons of either sex between 15 and 20 years.	0.10	0.60	1.20

The daily stamps are for periods of work less than six days ; they are affixed to the ticket on the date of the usual payment, or on the day of dismissal, should this occur previous to that date.

§ 3. PAYMENT OF PENSIONS.

Those who are compulsorily insured have a right —

(1) to an old age pension when they have completed 65 years of age, provided that they have paid at least 240 fortnightly contributions ;

(2) to an invalidity pension at any age if their permanent incapacity for work is ascertained, provided that they have paid at least 120 fortnightly contributions. An insured person is considered incapable of work if his earning capacity is reduced to less than one-third of the usual regular earnings of persons of the same trade in the same locality. If the worker is disabled as the result of an accident at work, and if he is compulsorily insured against accidents, the pension for disablement will be reduced to the difference between the sum paid as compensation for the accident and the amount of the normal invalidity pension.

(3) To a monthly allowance of 50 liras for six months to the widow or the children under 15 years of age if the insured person should die before having a right to the payment of the pension.

The State will assist in the payment of pensions for invalidity and old age to the amount of 100 liras a year for every insured person ; it undertakes also to pay half the amount of the allowances paid for six months to the widow and children under age.

In addition to the 100 liras paid by the State, the old age and invalidity pension is calculated at 66 per cent. of the whole amount of the first 120 fortnightly contributions, 50 per cent of the next 120 fortnightly contributions, and 25 per cent of the remaining contributions.

Even when no contribution has been paid, (a) the period of military service, voluntary or compulsory, and (b) a period of illness up to the maximum limit of one year are taken into consideration in determining the right to a pension and the amount of such pension.

For these periods, even if no contribution has been paid, insured per-

sons will be considered as having paid the lowest contribution fixed by the table of contributions, viz. 1 lira per fortnight.

A period of illness, however, of less than seven days is not calculated nor is one of longer duration if the insured person is receiving full salary or wages.

Periods of illness longer than seven days must be taken into consideration if there is any reduction of pay.

Pensions are paid monthly, and as a rule through the post office.

Lastly it must be pointed out that the revision of the pension is permissible should the condition of the invalid receiving it improve. The *Cassa Nazionale per le Assicurazioni Sociali* is empowered by granting loans to facilitate the establishment and the working of sanatoria for the prevention of illness, and the care and treatment of invalids. It also has power to assist within the limits of the sums collected in excess of the engagement undertaken in relation to insured persons (1) to encourage by means of prizes or in other ways the adoption and diffusion of measures for preventing accidents and illness connected with work, to remove or attenuate specially dangerous or unsanitary conditions in the surroundings of the work, or in the materials used or the methods of working, and to institute special schools with lectures on thrift, social insurance and assistance and first aid; (2) to assist clinics, hospitals, dispensaries and other specialized institutions intended to cure illnesses which might become chronic, and also institutions for teaching new trades to those no longer able to carry on their own.

§ 4. VOLUNTARY INSURANCE.

The State supports and regulates voluntary as well as compulsory insurance. Of voluntary insurance those who are already compulsorily insured may avail themselves if they wish to secure an additional pension through voluntary payments. Labourers not compulsorily insured may also take advantage of it; so also may independent labourers whose annual earnings do not exceed 4,200 liras; married women who are occupied in household work and whose husbands are compulsorily insured, and also other women engaged in household work, who pay not more than 30 francs in taxes on their incomes, who have no other trade, and to whom the cares of the household are principally entrusted; those who are no longer compulsorily insured; small land owners, tradesmen, manufacturers, and those belonging to the liberal professions who do not pay more than 200 liras a year in direct taxes. Voluntary insurance may be individual, or it may be collective, that is, it may be taken by mutual aid societies or co-operative societies for their own members, or by manufacturing, commercial, or agricultural firms, or by public administrative bodies for their dependents.

Voluntary insurance may be effected in two ways. It may be a simple old age or invalidity insurance, involving no right to the repay-

ment of the contributions if the insured person dies before qualifying for a pension; or the right may be reserved to the repayment, under these circumstances, of the contributions paid.

Those who are voluntarily insured naturally do not receive the contribution of the employer. The pension is constituted from the voluntary payments made by the insured person, and with the aid of the State, which will be given in the form of a life income with the following rules: (a) for voluntarily insured persons who are at the same time compulsorily insured, such aid will be given at the time of the payment of the pension derived from voluntary payments, by increasing that pension to the extent of one sixth of its amount; the State aid, however, not exceeding the limit of 100 liras annually, which as has already been stated, is also the maximum for pensions resulting from compulsory insurance; (b) for persons voluntarily, but not compulsorily insured, the State aid shall be one-third of the income derived from their payments, always within the limit of 100 liras annually.

§ 5. THE ADMINISTRATIVE MACHINERY AND THE REPRESENTATION OF EMPLOYERS AND OF INSURED PERSONS.

The central administrative body presiding over compulsory insurance is the *Cassa Nazionale per le Assicurazioni Sociali*, with headquarters in Rome. By the law of 21 April 1919, this denomination was assumed by the *Cassa Nazionale di Previdenza per l'Invalidità e la vecchiaia degli Operai*, which continues with regard to compulsory insurance the work assigned to it by law with regard to subsidized voluntary insurance.

The local administrative bodies for compulsory insurance are the *Istituti provinciali di previdenza sociale* which are to be established in single provinces or for groups of provinces, and are to be endowed with considerable independence in the management of their own affairs. Their duty is to supervise and direct everything connected with compulsory insurance within their respective areas; to draw up rules for the collection of contributions; to put themselves in communication with mutual aid societies and similar institutions of thrift and with industrial and labour organizations within their areas with a view to the prevention and cure of physical incapacity; to receive and examine the applications for pensions; to ascertain the extent of the invalidity and to revise the estimates made; to promote voluntary insurance and thrift in general; to express their views about the rate of contribution as compared with earnings, and the estimation of average wages; in short, to perform all the functions attributed to them by the *Cassa Nazionale per le Assicurazioni Sociali*.

The *Cassa Nazionale* and the *Istituti Provinciali* have one feature in common, viz. the composition of their respective administrative councils to which employers of labour and insured persons send their elected representatives.

These representatives are chosen respectively by trade organizations of employers and of the insured persons. There are also in the Council of

Administration of the *Cassa Nazionale* two representatives of voluntary insurance, one of whom is appointed by the mutual aid societies and by the co-operative societies that have insured their members with the *Cassa Nazionale*.

Lastly, *Commissioni arbitrali di prima istanza* have been appointed in every provincial institute, as well as a *Commissione arbitrale centrale* in the Ministry of Industry, Commerce and Labour in Rome to decide controversies respecting the application of the law of compulsory insurance. These Commissions, presided over by a magistrate, comprise equal numbers of representatives of employers of labour and of insured persons.

* * *

It must be remembered that previous to the promulgation of the law described above for insurance against invalidity and old age, another important provision was in force in Italy : compulsory insurance against accidents in agricultural labour (1) by which through the annual contribution of 15,000,000 liras paid by the landowners, nine millions of peasants were benefited. On the other hand, a special Commission for inquiry into the difficult question of insuring against illness, has recently finished its work and presented its suggestions : with a contribution of from 3 to 4 per cent. of wages, half to be paid by workers and half by employers of labour, together with a contribution from the State it would be possible to ensure to 12 millions of workers medical assistance and admission to a hospital, with an allowance of about half their wages. On this subject there will soon be definite provisions. Compulsory insurance has also been lately introduced against involuntary unemployment (2) on a scale so vast as to comprehend 12 millions of workmen and private employés, who, as well as the State and the employers, will pay their contribution, and will therefore be interested in the judicious management of the insurance companies. Nevertheless, with the provisions already existing for accidents to workmen, for invalidity, old age and unemployment a system of insurance, incomplete only as regards illness, has been build up and will by degrees be unified and co-ordinated. Italy has thus attained one of the highest positions among civilized nations with regard to social insurance.

(1) See the article in our issue of March 1920.

(2) See the article in our issue of April 1920.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE
AND THRIFT IN VARIOUS COUNTRIES

CZECHO-SLOVAKIA

THE PRAGUE ASSOCIATION OF LARGE PROPRIETORS AND TENANT FARMERS FOR MUTUAL INSURANCE AGAINST HAIL. — KAIZ (O 1. Jest sestatěm krupobitného pojištění v rámci zemědělství (*Is the Organisation of Insurance against Hail of use to Agriculture?*). In *Československý Zemědělec* (*The Czecho-Slovak Agriculturist*) Nos. 14 and 15, 1914 Prague

Mutual insurance against damage caused by hail was organised in 1913 by the Prague Association of Large Proprietors and Tenant Farmers with the immediate object of protecting its members from speculations of private insurance companies, and in the second place to bring about in this way a diminution in the cost of insurance itself.

The Mutual Association in question was constituted on the following lines :

Premiums of insurance against hail must not exceed the amount of damage done during the year, including cost of management and the percentage for the formation of the reserve capital, which capital must always remain the property of individual members in proportion to the premiums paid by them.

In addition to this it was laid down that damage caused by hail should not be allowed to lead to the enrichment of the person insured, but that the compensation paid should correspond to the loss actually suffered. It was, therefore, arranged that the valuation of the loss must always be made by an official, together with two independent members appointed to this duty by the administration, to which the member who has suffered the damage should have the right of appeal if he is not satisfied with the decision of the valuers.

Lastly the conditions of insurance prescribe that for damage less than 15 per cent. compensation is not payable, because the object of insurance against hail is to secure the agriculturist against damage which might threaten his existence or weaken him economically ; in general no account is taken of damage caused by a short drought or other slight loss due to weather conditions.

The procedure of the Mutual Insurance Association is as follows: the premium is calculated according to the tariffs of insurance companies, but as this could not be promptly paid up by all the members a draft for the amount is given instead. The compensation together with the cost of management and the percentage for the reserve fund are divided among the members in proportion to the value insured. The sum paid towards the re-

serve fund remains, as already pointed out, the property of the individual member and is entered to his credit.

This is the system followed by the Mutual Insurance Association; the results of its work between the years 1913 and 1918 are shown in the following table.

Work of the Prague Association for Mutual Insurance against Hail during the years 1913-1918.

Year	No. of insured	Value insured		Amount of premiums actually paid up	Compensation paid	Cost of management	Total of compensation paid and cost of management	Percentage of premiums actually paid up	Excess of premiums actually paid up over compensation paid and cost of management
		Hectares	Crowns	Crowns	Crowns	Crowns	Crowns		Crowns
1913	56	5,504	3,737,650	109,650	5,912	5,712	11,624	10.6	98,026
1914	85	8,451	4,648,960	183,052	24,615	11,995	36,610	20—	146,442
1915	93	10,425	9,876,640	316,528	122,961	15,650	138,611	40—	207,917
1916	118	13,145	12,315,820	428,449	320,385	31,043	351,328	82—	77,121
1917	119	12,311	11,276,870	396,352	71,059	28,179	99,238	25—	297,114
1918	140	14,932	18,329,415	684,945	97,445	39,544	136,989	20—	547,956
1913-18	—	63,173	61,205,355	2,149,576	642,277	132,123	774,400	33—	1,375,176

The total compensation paid added to the cost of management (see table) in the six years 1913-18 represents 33 per cent of the premiums actually paid up. In other words the mutual insurance has cost —

in 1913	89.4 %	in 1916	18 %
1914	80 %	1917	75 %
1915	60 %	1918	80 %

and in the six years 1913-1918, 67 per cent less than in private insurance companies.

The cost of management, expressed as a percentage of the premiums actually paid up, was as follows:

in 1913	5.1 %	in 1916	7.3 %
1914	6.5 %	1917	6.25 %
1915	1.5 %	1918	5.75 %

and the average of the six years in question was 5.9 %.

In six years the Association, by the insurance of the field crops, has saved more than 1 1/2 million crowns, including the interest of annual savings. With part of this capital the reserve fund had been formed,

which now amounts to about a million crowns, and which even in the more difficult years represents for the members an adequate guarantee. Lastly it must be added that the Association, in the first years of its work, when the reserve fund was not in existence, deducted 10 per cent. on the compensation paid.

DENMARK.

THE ACCIDENT INSURANCE COMPANY FOR DAIRIES AND AGRICULTURE. —
Andelsbladet, Nos. 17 and 19, 23 April and 7 May 1920.

In Copenhagen on 15 and 16 April there was a meeting of the representatives of the Accident Insurance Company for Dairies and Agriculture (*Mejeriernes og Landbrugets Ulykkeforsikring*).

From the President's report it appears that at the end of 1919, the number of members was about 219,000, (against 211,000 at the end of 1918) including about 1,300 dairies, about 82,000 other compulsory insurances, about 30,000 voluntary insurances, and about 106,000 individual insurances, comprising about 500,000 persons.

In 1919, 2,975 accidents were reported (against 2,661 in 1918). From the previous year 1,006 cases had been brought forward and from 1917 163 cases so that in 1919 4,144 cases were dealt with. Of these 1,339 were carried forward to the following year, while 2,805 were settled: in 2,112 cases no compensation was payable (except in the form of daily allowances) and in the remaining 693 cases compensation for death or disablement was paid to the amount of about 584,000 crowns. To this sum must be added about 266,000 crowns of daily allowances, which gives a total of about 850,000 crowns. They were thus divided among the different categories of insurance: dairies 59,000 crowns; compulsory insurances, 376,000 crowns; voluntary insurances, 82,000 crowns; and private insurance, 334,000 crowns. The whole sum paid for losses since 1898 amounts to about 6,000,000 crowns.

The premiums paid in 1919 amounted to 1,379,621 crowns, of which about 701,000 crowns were for compulsory insurances, about 84,000 crowns as supplementary to compulsory insurances, and 594,000 crowns for individual insurances. The whole amount of premiums in the 21 years of the existence of the company amounted to about 9,000,000 of crowns.

The cost of management, strictly speaking, absorbed 19 per cent. of the premiums, or 23 per cent., taking into account the cost of mediation, etc., rather higher than during the preceding year, because the increase of the premiums is not in the same proportion as the great increase of the expenses.

The profit was 189,128.71 crowns, but of this sum 130,000 crowns were paid into the compensation reserve fund (100,000 for legal compulsory insurance, and 30,000 for individual insurance). The rest of the surplus, 59,128.71 crowns, was paid to the reserve fund, raising it to 596,715.14 crowns.

The account of receipts and expenditure in the course of the year in question, and the position of the balance sheet on 31 December 1919 are as follows:

Receipts and Expenditure 1919.

<i>Receipts.</i>	<i>Crowns</i>	<i>Expenditure.</i>	<i>Crowns</i>
Premiums	1,379,621	Premiums reimbursed	39,549
Interest	18,617	Compensation	850,844
Sundry receipts	1,474	Compensation reserve.	920,000
Compensation reserve brought forward from the previous year	790,000	Cost of management	242,442
		Cost of printing, collecting (agents, etc)	59,009
		Depreciation of furniture. . .	4,085
		Contribution to pension fund	5,033
		Sundry expenses.	9,621
		Surplus	59,129
<i>Total . . .</i>	<i>2,189,712</i>	<i>Total . . .</i>	<i>2,189,712</i>

Balance sheet on 31 December 1919.

<i>Assets.</i>	<i>Crowns</i>	<i>Liabilities.</i>	<i>Crowns</i>
Premiums due	1,277	Guarantee sums contributed by dairies	3,148
Contributions from the State for legal insurances, whether compulsory or voluntary . .	1,010	Compensation reserve	920,000
Sundry debtors	37,821	Sundry creditors.	46,409
In hand	2,309	Mortgage credit on real property belonging to the Company.	195,614
In bank	40,504	Reserve fund	596,715
Securities	83,498		
Buildings and fixtures . . .	320,241		
Shares of the Danish Co-operative Bank.	19,500		
<i>Total . . .</i>	<i>1,781,886</i>	<i>Total . . .</i>	<i>1,781,886</i>

FRANCE.

HAIR, INSURANCE IN 1919. — *L'Argus* Paris, 9 May 1920.

The year 1919 was favourable for hail insurance, the average of losses as compared with the premiums having fallen to 46 per cent. as against 61 per cent. in 1918 and 141 per cent. in 1917.

TABLE I. — *Hail Insurance Companies and Societies in 1919.*

	<i>Joint-stock companies</i>	<i>Mutual societies</i>	<i>Total</i>
Number of persons insured.	100,241	109,486	209,727
	francs	francs	francs
Values insured	721,519,274	1,034,444,236	1,755,963,510
Premiums or contributions	13,518,076	12,449,581	25,967,657
Losses and costs of settlement	5,664,566	6,338,368	12,002,934
Profit on the year's working.	3,153,365	3,851,781	7,005,146
Reserve fund at the end of the year . . .	6,186,675	18,554,291	24,742,866

TABLE II. - *Progress of Hail Insurance from 1888 to 1919.*

Years	Persons insured	Values insured francs	Premiums and contributions francs	Losses francs	Profit or loss francs	Reserve fund at the end of the year francs
1888	126,001	538,087,810	7,113,927	6,726,578	— 845,014	1,105,543
1889	122,085	552,254,913	7,476,196	4,072,483	1,851,056	2,192,439
1890	131,213	602,834,132	8,044,770	5,655,381	+ 2,330,831	3,631,858
1891	129,141	532,782,965	7,116,001	4,917,021	1,063,917	4,114,411
1892	134,816	567,428,604	7,726,258	5,028,166	1,200,513	4,757,842
1893	132,760	542,970,689	7,357,725	5,020,883	998,906	4,900,234
1894	133,281	591,849,895	7,949,069	3,558,453	+ 2,847,771	6,858,545
1895	117,171	509,190,442	7,797,317	9,216,359	— 2,614,735	3,950,267
1896	114,864	492,560,342	7,568,987	4,393,037	+ 1,291,971	4,774,106
1897	115,440	513,353,420	7,411,530	7,654,821	— 1,622,564	3,494,334
1898	151,101	718,763,943	9,163,689	2,763,914	+ 4,241,371	6,615,446
1899	146,250	639,063,026	8,737,095	6,498,150	— 576,309	6,715,329
1900	151,017	634,960,908	8,897,943	6,714,908	— 423,149	6,735,563
1901	156,375	656,727,570	9,375,281	6,167,211	+ 1,516,880	7,393,245
1902	161,228	705,638,179	9,047,442	6,119,884	+ 1,245,246	8,330,047
1903	168,313	740,611,718	9,938,811	4,174,547	+ 3,751,789	10,338,589
1904	169,380	749,441,949	9,930,929	5,200,296	+ 2,822,197	12,213,988
1905	155,399	723,783,297	9,085,871	6,981,617	+ 877,486	13,108,122
1906	171,749	806,467,893	9,954,397	3,369,051	+ 4,465,886	14,183,540
1907	172,399	824,860,424	9,750,045	3,834,687	+ 3,814,315	17,291,082
1908	176,951	844,410,330	11,097,993	1,1015,787	— 3,137,511	17,950,000
1909	178,637	880,119,939	10,432,995	4,780,421	+ 5,875,440	16,109,692
1910	195,816	948,886,532	11,779,914	7,607,373	+ 1,827,260	13,430,557
1911	203,880	965,595,599	12,074,442	8,019,939	+ 1,803,365	14,136,941
1912	206,131	1,011,828,865	12,769,102	8,240,589	+ 2,135,105	15,869,659
1913	220,616	1,111,915,867	14,165,017	7,906,173	+ 3,729,357	18,898,222
1914	226,342	1,043,503,005	14,414,013	7,188,568	+ 2,652,999	19,092,824
1915	201,859	927,128,713	12,861,733	6,311,446	+ 1,708,037	23,246,462
1916	198,316	933,510,419	13,591,365	9,850,359	+ 228,857	23,644,005
1917	196,938	977,210,121	16,036,121	23,672,950	— 9,364,333	15,171,945
1918	193,458	1,026,729,265	23,775,121	14,755,418	+ 3,436,212	18,753,134
1919	209,927	1,755,963,510	25,967,657	12,002,934	+ 7,005,746	24,742,866

The number of persons insured exceeded by 16,000 that of the preceding year. The values insured had increased by about 135,000,000 francs which is explained not only by the higher valuation of the crops, but also by a larger volume of insurance, in which Alsace and Lorraine figure for an important amount.

The reserve fund of the joint stock companies and the mutual societies

exceeds 25 million francs, an increase of 6 millions on that of the preceding year.

If we compare the joint stock companies and the mutual societies the account will stand as shown in Table I (page 55). In Table II (page 551) we give statistics showing the development of hail insurance in France since 1888; in this table, the figures for joint stock companies and mutual societies are added together.

GREAT BRITAIN AND IRELAND.

CATTLE INSURANCE SOCIETIES — Reports of the Chief Registrar of Friendly Societies for the Year ending 31st December 1917. Part B: Industrial and Provident Societies. London, 1920.

The following table contains the official statistics for the years 1913 to 1917 of the cattle insurance societies in Great Britain and Ireland registered under the Friendly Societies Act. It should be noted that a large number of unregistered societies exist for the insurance of cows, horses and especially pigs, of which statistics are not available.

Cattle Insurance Societies registered under the Friendly Societies Act

	1917	1916	1915	1914	1913
Number of Societies furnishing Returns	66	66	66	66	61
Number of members	3,636	3,611	3,730	3,747	5,212
	£	£	£	£	£
Contribution	1,566	(1)	(1)	(1)	(1)
Benefits	1,040	1,757	(1)	(1)	(1)
Number Insured :					
Cattle	10,615	20,192	28,521	27,053	22,607
Swine	7,127	3,750	1,010	3,927	3,376
Horses	374	382	443	384	389
	£	£	£	£	£
Funds	9,850	9,654	9,408	9,151	8,839

(1) Particulars not available.

Part III: Credit

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINA

THE "CREDIT FONCIER DE BUENOS AIRES ET DES PROVINCES ARGENTINES"
IN 1919 — *L'Economiste Français* Paris, 19 June 1920

The European situation was very favourable to the economic development of the Argentine Republic in 1919. Owing to the necessities, always becoming more urgent, of the countries which were engaged in the war, and to a series of good harvests in Argentina, that country was able to export large quantities of vegetable and animal produce under remarkably advantageous conditions which have enriched nearly all the producers.

For the last four years the commercial exchanges of Argentina have constantly shown a considerable excess of exports over imports and the stock of gold in the country has proportionately increased. On 31 December last, it had risen to nearly 455,000,000 piastres in gold, which at the par value of 5 francs to a gold piastre represents 2,275,000,000 fr. and at the present rate of exchange, more than 6,000,000,000 fr. The gold deposited in the Bank for the Conversion of Paper Money amounts to 389,000,000 gold piastres, and represents in relation to the circulation of notes a proportion of about 75 per cent, a rate no longer to be found in Europe. At the same time, the deposits in the banks amounted to 2,834,248,000 piastres in paper, representing, at 2 20 fr. to a paper piastre, the sum of 6,235,000,000 fr.

This plethora of capital, together with social unrest, has diminished the demand for mortgage loans, and accentuated the decrease in the value of silver during the whole of the first half of 1919, making it increasingly difficult to re-invest the capital repaid to the mortgage loan companies.

However, a change in this respect began to be perceptible during the three months October to December 1919, partly caused by the imports of manufactured produce and articles of luxury which Europe will henceforth supply more and more to Argentina.

In December 1919 the *Credit Foncier de Buenos Aires et des Provinces*

Argentines had 756 mortgage loans outstanding forming, if the piastre is reckoned at par, the sum of. fr. 40,407,597,20

In the year 1919, 142 loans were repaid amounting altogether to. » 6,859,040.—

Which reduced the number of old loans to 614 and

their amount to fr. 33,548,557.20

The loans contracted in 1919 were 51 in number and

they amounted to » 9,689,200.—

On 31 December 1919 there were outstanding 665

mortgage loans amounting to » 43,237,757.20

From this sum should be deducted the partial re-

payments of previous loans and the sums not yet

paid, amounting to. » 4,774,369.—

Which brings to fr. 38,463,388.20

the exact amount of mortgage credit on 31 December 1919, as against 35,110,116.70 fr. the previous year.

ITALY.

THE AGRICULTURAL CREDIT SECTION OF THE BANK OF SICILY IN 1919.—Rendiconto e bilancio consuntivo sul servizio del credito agrario. Esercizio 1919. Consiglio Generale del Banco di Sicilia. Sessione ordinaria del 1920. Palermo, 1920.

The granting of agricultural credit in Sicily is carried on by a special section of the Bank of Sicily, which usually acts, as the Savings Bank of the Bank of Naples does for the southern provinces of the kingdom and for Sardinia, through the medium of local institutions, generally co-operative in form, known as intermediary bodies. On 31 December 1919 these numbered 307; 287 were co-operative societies, and twenty were constituted as legally recognised bodies. Divided according to their nature, the societies admitted to the "fido agrario" were at the above date thus distinguished; 123 agricultural co-operative societies of production and labour, 88 agricultural credit societies, 45 rural credit societies, 17 agricultural consortia, 13 agricultural banks, 11 *Monti frumentari*, 7 agricultural associations, and 3 popular banks. In 1919 the number of intermediary bodies holding collective leases (*affittanze collettive*) diminished from 31 to 28, while the

extent of land held by them rose from 23,835.36 hectares to 24,323.66. The number of members of the 307 intermediary bodies amounted to 42,835, and their owned capital to 4,560,518 liras. The aggregate deposits amounted to 24,186,882 liras and the bills in hand to 11,721,377 liras. On 31 December 1919 half the communes of the island — 179 out of 358 — had intermediary bodies for the distribution of agricultural credit. The total amount assigned to the "fidi" by the Section amounted in 1919 to 15,532,000 liras. This sum corresponds to about one-fourteenth of the entire guarantee offered by the societies with their capital and with the property of their members, whose liability is unlimited. In 1919 the Section carried out 11,511 transactions amounting to 9,357,873 liras. Compared with the preceding year these transactions show a diminution of 885 in the number of bills discounted, and an increase of 1,625,354 liras in the money so employed. The altered proportion between the number of transactions and their amount is due to the increased cost of all kinds of goods and the rise of wages; while the reduction in the number of transactions is evidently due to the increased prosperity of the agriculturists and the greater abundance of money in the country.

Of the 11,152 bills of exchange for 9,357,873 liras discounted, as above stated, by the Section, 10,906 for 7,506,858 liras represented transactions with or through the intermediary bodies. Of these, 10,872 for 5,125,969 liras were issued by agriculturists in favour of the intermediary bodies and by these passed on to the section, and 124 for 2,380,989 liras were discounted directly to intermediary bodies. Loans to private persons, mostly to large farmers, who could not have been financed by the intermediary bodies, numbered 124 and amounted to 2,380,989 liras.

With regard to the objects of these loans, they may be divided into the following groups: (1) for seed, manures, spraying materials, cultivation and harvesting, there were 10,915 amounting to 6,790,011 liras; (2) for machinery, implements, and live or dead stock, 113 amounting to 186,873 liras; (3) direct discounts to intermediary bodies, 124 amounting to 2,380,989 liras. The loans in the third group were for the most part for collective purchases, 2,002,313 liras being granted for this purpose. The whole number of transactions effected in 1919 may be thus classified according to the status of the borrower:

	Number of bills	Amount — Liras
Proprietors	5,415	3,280,565.75
Tenants	4,504	3,202,319.83
Metayers	928	406,243.95
Tenants in emphyteusis	181	87,754.50
Total . . .	11,028	6,976,884.03 (1)

(1) There were besides 124 bills amounting to 2,380,989 liras directly discounted for intermediary bodies.

According to crops the same transactions may be divided as follows :

	Number of bills —	Amount — Liras
Cereals, etc.	6,700	5,102,037.19
Vines	2,229	939,020.25
Oranges and lemons.	1,540	730,755.09
Olives	156	65,484.05
Various crops.	403	139,587.55
Totals	11,028	6,976,884.13

Interest at $4\frac{1}{4}$ per cent. was charged on all loans granted during the year.

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* *

2. LAND CREDIT INSTITUTIONS. — Istituto Italiano di Credito Fondiario. Relazione del Consiglio di Amministrazione e dei Sindaci per l'anno 1919. Rome 1920. — Credito Fondiario della Cassa di Risparmio delle Province Lombarde. Bilancio consuntivo dell'anno 1919. Milan, 1920. — Credito Fondiario della Cassa di Risparmio di Bologna. Resoconto del 1919. Bologna, 1920.

By means of the annual reports of the land credit institutions, as they are published, we may follow the course of this important branch of credit in 1919. For 1918 we refer the reader to our issue of last May, in which we indicated the chief legislative provisions on the subject, passed under the impulse of the new exigences created by the war.

The Management Committee of the *Istituto Italiano di Credito Fondiario* (Rome) in its report on the results of the work of last year, points out that they show a marked increase in the loan transactions of the *Istituto*, both as regards the number of applications and the amount of the loans granted, which reached more than $18\frac{1}{2}$ millions of liras, twice the amount reached in the previous year. In 1919 there were 206 applications for loans, to the amount of 37,463,500 liras, of which 73, to the amount of 17,205,000 liras were guaranteed on rural property, and 133 to the amount of 20,258,500 liras were guaranteed on urban property, while in 1918 they were 160 to the amount of 17,497,000 liras: there was therefore last year the very considerable increase of 46 applications for a total amount of 19,966,500 liras.

The loans issued in 1919 were 107 for 18,674,500 liras: in the previous year there were 96 for 9,314,000 liras. In comparison with 1918 there was therefore an increase of 11 loans for 9,360,500 liras.

The loans granted in 1919 are guaranteed by first mortgages on property to the value of 376,696,380 liras and are divided according to the nature of the property mortgaged, in the following manner:

	Number	Amount — Liras
Loans on rural property	31	5,630,000
Loans on urban property.	76	13,044,500
Total . . .	107	18,674,500

The sums employed, with great advantage to those concerned, to pay off mortgages and other charges amount to 10 $\frac{1}{2}$ million liras, equal to 56 per cent of the 18.6 million liras advanced during the year.

The loans outstanding on 31 December 1919, after deducting the half-yearly instalments and the repayments in advance, were 2,786 for 196.579,721 liras, an increase of 8,866,731 liras on those of 1918.

As regards the *Istituto Italiano di Credito Fondiario*, we must not forget the law of 2 September 1919, No. 1709, by which its functions were extended to new branches of economic activity needing at that time special assistance. This law authorised the *Istituto* to constitute at its own headquarters a *Sezione per il credito e il risparmio*, designed to encourage improvement of agriculture, irrigation, reclamation, building and other works of public utility. The new Section is independently managed, has funds of its own, and its own committee and auditors. It has a special guarantee fund of 100 million liras half of which is to be invested in Treasury bonds or in other securities issued or guaranteed by the State or in mortgage bonds, and the other half in loans to provinces, communes, consortia or other institutions. The Section is also authorised to receive savings-bank deposits and open current accounts, to an amount not exceeding 100 million liras.

The Executive Committee of the *Credito Fondiario della Cassa di Risparmio delle province Lombarde* (Milan) points out in its report on the past year that the amount of the loans outstanding, which for a long series of years had continued to rise without interruption, until on 31 December 1916 it reached the sum of 208,525,888 liras, from that date began to decline, and at the end of 1919 it had diminished to 194,831,842 liras. The causes of this decrease are well known, and we have frequently had occasion to point them out; the serious disturbance caused by the war in the whole economic framework of the country could not but have an effect on mortgage credit, and indeed on the one hand the suspension of all activity in the building trade, continually in a critical state, removed all need for new applications for loans, and on the other hand the easy realization of landed property and the very remunerative prices of the produce of the soil determined the voluntary repayment of loans, further facilitated by the market price of bonds which remained under par during the whole year. In fact during the past year, this *Istituto* granted 83 new loans to the amount of 8,389,000 liras against 267 loans to the amount of 12,182,832 liras repaid.

The *Credito Fondiario della Cassa di Risparmio di Bologna* in 1919 granted 80 loans to the amount of 5,330,000 liras.

In our issue of last May we mentioned the establishment in July 1919 among the Savings-banks of Verona, Padua, Venice, Udine, Treviso and the

Istituto Federale di credito per il risorgimento delle Venezie of a great new institution to be called the *Istituto di Credito Fondiario delle Venezie*. Another innovation must now be mentioned; the *Credito Fondiario Sardo*, already authorized to carry on land credit transactions in the island of Sardinia, has been authorized by a decree of 18 April 1920, No. 583, to do similar business throughout the kingdom.

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3. THE SAVINGS DEPOSITS IN CREDIT AND SAVINGS BANKS. — *Esposizione finanziaria fatta alla Camera dei Deputati dal Ministro del Tesoro nella seduta del 16 dicembre 1919. Rome, 1919.*

In view of the present economic conditions it is interesting to glance at an essential element of production, the question of savings, in order to judge of the means available for the work of reconstruction.

The progress of the national savings in the various institutions, during the last ten years was as follows :

On 30 June	Liras	On 30 June	Liras
1910 . . .	6,490,690,179	1915 . . .	7,056,259,026
1911 . . .	6,934,161,991	1916 . . .	7,902,450,352
1912 . . .	7,051,546,439	1917 . . .	9,538,874,546
1913 . . .	7,220,376,046	1918 . . .	12,231,809,230
1914 . . .	7,595,382,667	1919 . . .	17,435,504,664

The savings, except on 30 June 1915, the year when Italy entered the war, steadily increased. We shall now see how they were divided among the various institutions on 30 June 1919.

	Liras
Institutions issuing notes	774,511,439
Ordinary credit institutions	3,447,650,706
Popular banks	1,423,739,540
Other co-operative banks	1,237,320,598
Ordinary savings banks	5,589,189,595
Post-office savings-banks	4,223,740,806
<i>Monti di Pietà</i>	457,360,452
Rural banks	281,991,528

The ordinary and postal savings-banks take the first place; next come the ordinary credit institutions. The increase of small savings collected by popular, co-operative and rural banks from 1,314,000,000 liras on 30 June 1914 to 2,043,000,000 liras on 30 June 1919, is a hopeful indication of the economic condition of the country.

PORTUGAL.

ESTABLISHMENT OF A NATIONAL AGRICULTURAL BANK. — *Boletim da Associação Central da Agricultura Portuguesa*. Lisbon, May 1920.

Through the initiative of the Portuguese Central Association of Agriculture aided by the agricultural syndicates and their federations, by the regional co-operative credit banks, by the agricultural co-operative societies and by all other agricultural associations existing in the Republic, a new credit organisation is about to be established in Portugal which will be called the National Agricultural Bank.

The principal transactions which the Bank proposes to undertake are the following :

(1) To grant loans to farmers by discounting their bills ; to open current accounts ; to receive deposits payable at sight or at fixed terms ; to buy implements, machinery and live stock to be hired or sold with facilities for payment ; to provide seed, manures, etc. for farmers.

(2) To promote and facilitate all work relating to agriculture, such as the breaking up of uncultivated land, afforestation, drainage and irrigation of land ; improvement of property by means of advances of money to the owner ; creating such agricultural industries as may be best adapted to the various localities of the country, ensuring to the farmers a share in any enterprise set on foot for such purposes ; to choose according to districts the best and most productive breed of live stock ; to encourage industries connected with stock farming, and lastly to take steps to place agricultural produce on the food markets, advancing to the producer part of the value of such produce.

(3) To establish agricultural colonies, by means of contracts with landowners, with the State or with administrative bodies, or on property bought by the Bank, and to give the colonists facilities for purchasing the land. The Bank is also to establish schools, co-operative societies, savings banks, etc. according to the importance of the colony. The contracts with the colonists are to be for 30 years. A special form of insurance is also to be established by which the colonist at his death shall be able to leave his property to his heirs free from any incumbrance.

Lastly the Bank proposes to give large assistance to drainage and irrigation works necessary for agriculture, and to develop all means of communication that may facilitate the marketing of agricultural produce.

Part IV: Agricultural Economy in General

JAPAN.

THE FOOD SUPPLY QUESTION AND THE NATIONAL POLICY OF HOME PRODUCTION.

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INTRODUCTION.

The war has proved to Japan the absolute necessity of attaining to independence in the matter of food supply. The rice crisis of 1918 has made still more urgent the solution of the question, already exceedingly difficult. Rice is the staple food of the nation ; its production is every year making progress, owing to various government enactments, but its consumption is also increasing, whether because of the increase of population, or of the increased average consumption per head of the population. It also seems that Japan has already utilized to the full the lands adapted to the cultivation of rice ; though it has at its disposal a considerable area which would be cultivable after the execution of works of various kinds more or less easy to carry out, it is doubtful whether an extension of the rice fields is possible in a proportion to meet the ever growing necessities of national consumption.

These difficulties are now so pressing in Japan, that it has become necessary to inquire whether it is not time to adopt a substitute (*daiyō-shokuryō*) for the national food. The economic and technical reviews are full of interesting articles and essays on this subject, and many agricultural congresses and associations have had long discussions, and sent petitions to the government, which on its part, is working actively to encourage officials to adopt some food other than rice.

We shall see in the course of this article how the agricultural programme which the government of Japan intends to carry out in the next few years, proposes to solve not only the question of rice, but also that of complete national independence as regards food supplies. Now though the solution contemplated by the programme which we are about to discuss is doubtful as to the possibility of adapting reclaimed land to rice cultivation, it is clear that when Japan succeeds in diminishing considerably the consumption of rice, substituting for it, at least in part, some other food, the food supply question now so serious in Japan will be easily solved.

§ 1. THE PRESENT SITUATION IN REGARD TO THE FOOD SUPPLY.

The situation in Japan in regard to the food supply has become serious, owing to two factors, the increase in the population, and the increase of the average consumption of food per inhabitant. Other causes are the

TABLE I. — (Comparative Table of Food Production.

	Total production			Area sown		Average return per tan (3)		Value of production in 1917
	1908	1917		1908	1917	1908	1917	
	Koku (1)	Koku		Chō (2)	Chō	Koku	Chō	Yen
Rice	51,033,803	54,568,007	2,922.318	3 083,782		1,777	1,769	1,103,948,822
Mugi (general term including barley, rye, and wheat)	21,134,496 (4)	24,152,150	1,732.101	1,746,927		1,203	1,383 (4)	217,006,208
Awa (<i>Salaria italica</i>)	2,379,965	1,884,061	201,265	157,253		1,133	1,109	16,956,402
Hie (<i>Panicum frumentaceum</i>)	813,332	775,195	61,383	51,217		1,326	1,513	3,957,980
Sorghum (<i>Kibi</i> ; <i>Panicum miliaceum</i>)	334,828	339,766	30,894	28,171		1,084	1,206	3,223,386
Buckwheat (<i>Soba</i>)	1,234,178	935,132	165,542	142,766		746	652	8,249,112
Maize (<i>Tomorokoshi</i>)	636,503	710,671	52,532	56,338		1,212	1,315	5,984,682
	Kwan (6)	Kwan				Kwan	Kwan	
Sweet potatoes (<i>Salsume-ino</i>)	963,738,286	1,000,359,836	304,418	310,416		317	318	75,648,298
Common potatoes (<i>Jagatarimo</i>)	153,671,857	345,576,314	60,694	12,051		253	283	23,326,619
	Koku	Koku				Koku	Koku	
Soya (<i>Daisu</i>)	3,802,934	3,601,662	495,802	434,184		785	830	48,357,859
Asahi (a kind of red lentils: <i>Phaseolus radiatus</i> var. <i>aurea</i>)	871,099	871,211	140,006	123,208		825	707	12,872,195
Peas (<i>Endō</i> ; <i>Pisum sativum</i>)	267,854	761,380	29,609	90,537		905	841	15,128,637
Beans (<i>Soramame</i> ; <i>vicia faba</i>)	441,261	517,971	41,613	47,086		1,058	1,100	5,706,790

(1) *koku* a measure of capacity, equal to 180,3907 litres. — (2) *chō* square measure equal to 99.1731 ares. — (3) *tan* square measure, equal to 9.9174 ares. (4) Including 9,118,844 *koku* of barley; 8,197,099 *koku* of rye; 6,787,478 of wheat. — (5) Including 6,864,300 yen of barley; 80,934,748 yen of rye; 80,107,166 yen of wheat. — (6) *Kwan* a weight, equal to 3,756 kilogrammes.

difficulty of obtaining food supplies from abroad, the consequent rise in prices, and the speculation which as usual accompanies dearth of provisions.

Before inquiring in what proportion Japan is dependent on foreign countries for food, it seems desirable to cast a rapid glance over its agricultural food production.

Its total value was 1,679,567,959 yen (1) in 1917.

In this total rice alone represents 1,103,948,822 yen; the value of *mugi* (2) is 217,906,208 yen and all the other secondary food products are valued at 357,712,929 yen. We have taken the year 1917 because it might be considered a normal year, when food prices were not excessively increased, as in the following years 1918 and 1919.

In Table I we give statistics relating to the chief agricultural products, comparing the production of 1908 with that of 1917. For this last year alone we can give the value of the agricultural produce, as for the preceding years there is no official valuation.

We now pass on to consider what is the value of imported food supplies.

The table below gives the figures referring to the chief articles of food and the total amount of imports of all food supplies.

TABLE II. — *Importation of the Chief Articles of Food in the ten years from 1910 to 1919.*

Year	Total importation of the chief articles of food yen	Rice yen	Wheat yen	Wheat flour yen	Soya yen
1910	27,172,055	8,641,439	3,338,243	1,739,238	8,977,772
1911	38,223,697	17,721,085	3,728,829	1,702,911	10,305,636
1912	52,494,843	30,193,481	4,409,938	1,722,140	8,270,711
1913	79,225,896	48,472,304	12,351,029	1,780,065	7,138,124
1914	53,717,067	24,823,933	8,488,997	1,264,032	10,200,376
1915	24,802,559	4,886,125	1,639,266	194,388	6,812,268
1916	19,579,952	3,087,616	1,356,088	94,739	4,540,629
1917	27,617,150	6,513,373	666,289	58,990	6,284,450
1918	141,314,804	89,755,678	9,940,529	1,286,639	11,999,085
1919	270,452,027	162,070,840	38,530,035	7,758,157	22,042,824

(1) yen = 2s. 037/64d at par.

(2) *mugi* is a general term comprehending: barley (*ōmugi* = *hordeum vulgare*): a variety of barley incorrectly known as rye (*hadaka-mugi* = *hordeum crastium nudum*) and wheat (*kōmugi* = *triticum vulgare*).

The exportation of the articles of food named in the above table is almost nothing for wheat and soya, but of rice, flour and other articles not included in the above table because not consumed in the country, or imported in insignificant quantities, the exportation is considerable.

TABLE III. — *Exportation of the Chief Articles of Food in the ten years from 1910 to 1919.*

Year	Total exportation of the chief articles of food	Rice	Wheat flour and various farinaceous articles	Beans
	yen	yen	yen	yen
1910	7,580,384	5,900,477	161,707	—
1911	7,481,348	3,940,541	184,544	—
1912	7,003,283	4,367,824	149,727	274,250
1913	6,892,150	4,372,979	119,886	445,651
1914	9,017,029	4,974,108	229,987	832,846
1915	24,414,898	9,676,969	2,928,426	4,662,105
1916	36,134,700	11,197,356	7,221,836	6,758,672
1917	79,716,299	14,112,546	28,800,683	22,559,918
1918	106,865,186	8,321,965	41,591,654	30,194,036
1919	52,754,469	4,327,690	13,104,015	18,673,791

§ 2. THE RICE CRISIS.

From the preceding statements it is easily seen that the position of Japan in regard to food supply depends essentially on the quantity of rice available. We shall now try to examine carefully with the data at our disposal, this serious question, which has an important influence on all the life and activity of the Japanese nation.

Such a crisis caused by the scarcity of rice is not new in the history of Japan; in fact, during the last two centuries it has been of frequent occurrence. Before the Imperial Restoration (1) whenever there was a rice famine, the government had recourse to the only means at its disposal, viz, the restriction or prohibition of the use of rice for the manufacture of *Sake* (2). The country was isolated from the world and could not count on importation from abroad; it had therefore no other means of mitigating the crisis. But now, for serious financial reasons, the Ministry of Finance

(1) *Ishin*: abolition of the Shogun government and restoration of the imperial prerogatives (1868).

(2) *Sake*: wine made from fermented rice.

is obliged to oppose any enactment of the kind; one of the most important sources of revenue is the tax on *sake*, and it would be difficult to renounce this without serious injury to the life of the nation.

The rice problem has in the last few years become very acute and the government has been compelled to carry out a programme of measures adapted to meet the crisis.

In the following table we have arranged the statistics relative to the production of rice compared with its consumption, in the period from 1888 to the present day.

TABLE IV. — *Deficit in the Production of Rice with regard to the Total Consumption.*

Average for periods of five years.	Production	Importation	Exportation	Excess (+) or deficit of production in relation to consumption
	roku	roku	roku	roku
1888-1892	38,562,741	573,385	656,462	+ 283,097
1893-1897	39,302,901	1,167,226	676,575	490,651
1898-1902	41,701,215	1,953,406	568,680	1,384,726
1903-1907	43,862,175	4,712,024	305,857	4,406,166
1908-1912	50,353,886	2,641,150	368,858	2,277,266
1913-1917	54,370,259	3,424,633	588,857	2,835,776
(1918)	(54,699,087)	(7,628,593)	(338,581)	(7,290,012)

Note. — The above figures referring to importation and exportation include also the quantity of rice brought into Japan from Korea or Formosa, or sent by Japan to these colonies.

The above table shows that in the five years from 1888 to 1892 the production of rice was not only sufficient for home consumption, but even gave a surplus for exportation. After that time it was constantly inferior to the consumption, though it had increased about 40 per cent.

The deficiency of rice notwithstanding the increased production is due to increased consumption, dependent in its turn on the increased population and the increased average consumption per head. The increase of production of rice is partly due to the greater area devoted to its cultivation, and partly to the increased average return per tan.

The two following tables give statistics relating to the causes of the increase of the production of rice, and of the increase of consumption.

TABLE V. — *Production of Rice.*

Average for periods of five years	Area devoted to rice cultivation	Index number	Average return per tan	Index number	Average production	Index number
	chō		kō		koku	
1888-1892	2,731,514.1	100	1.420	100	38,562,711	100
1893-1897	2,774,007.3	101	1.359	96	39,302,901	97
1898-1902	2,836,056.9	104	1.497	105	41,701,215	109
1903-1907	2,886,257.5	106	1.601	113	43,862,175	114
1908-1912	2,957,192.7	108	1.701	120	50,353,866	130
1913-1917	3,519,156	112	1.808	127	54,370,254	140

TABLE VI. — *Consumption of Rice.*

Average for periods of five years	Population	Index number	Average consumption per head	Index number	Consumption of rice	Index number
			koku		koku	
1889-1892	40,388,266	100	0.948	100	38,279,644	100
1893-1897	42,228,927	105	0.943	99	39,793,552	104
1898-1902	44,842,460	111	0.961	102	43,085,941	113
1903-1907	47,649,080	118	1.013	106	48,268,341	126
1908-1912	50,729,940	126	1.037	110	52,626,152	137
1913-1917	54,461,160	135	1.059	111	57,206,034	149

The consumption of rice has always been superior to the production, and while until 1903 the increased consumption was chiefly due to the increase of population, after that time two-thirds of the greater consumption were to be attributed to the increase of population and one-third to the increased average consumption per head.

The production of rice up to about 1900 increased chiefly because of the increased extent of the land devoted to its cultivation, but later about 70 per cent of the increased production was due to the larger return per tan.

The deficit of rice has been constant for the last twenty-five years becoming more acute of late, especially because of the increase in price.

In 1907 the deficit amounted to 2,835,776 koku, and in 1918 to about 7,290,010 koku.

In 1919, notwithstanding an abundant harvest, of about 60,733,387 koku, 11 per cent more than that of 1918, the deficit was almost equal to that of 1918.

The price of rice has been constantly increasing from 1908 to 1919, in an irregular manner as shown in the following table :

TABLE VII. — *The Price of Rice in the ten years from 1908 to 1917.*

Average price	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
	yen	yen	yen	yen	yen	yen	yen	yen	yen	yen
Of rice per koku	15.24	12.51	12.93	16.85	20.37	21.61	15.46	12.17	13.26	19.35
(index number)	(135)	(111)	(114)	(149)	(180)	(185)	(137)	(110)	(117)	(171)

Note. — The base number (100) corresponds to the average price of rice in 1900.

In 1918 the price of rice rose from about 23 yen to 47 yen and in 1919, it rose to 57 yen per koku. Supposing that the average consumption per head does not increase and that the number of the population remains at its present figure the deficit of the production of rice will reach 20 millions of koku in 20 years and 30 millions in 30 years..

The Department of Agriculture in the Ministry of Agriculture and Commerce published in March 1919 an interesting article on the forecasts regarding the need of rice and *mugi* in the future.

This article is founded on certain presupposed favourable conditions, viz. on the average for five years 1910-1914, when the rice deficit was only 1,684,000 koku and that of *mugi* was 1,006,000 koku, while the average consumption per head was calculated for rice at 1 koku and 2 shō (1).

It must be observed that these figures are much lower than those of the years following 1914, as the preceding tables show. It therefore seems that the statement of the Ministry of Agriculture about the future deficit is too optimistic, and that the figures given in the forecasts fall short of the reality.

From this statement we extract the following table, showing the estimated future increase in the consumption of rice and *mugi*, due to the increase of population computed at the average annual rate of 1.424 per 1000 inhabitants.

	Increase of population	Increase of consumption of rice koku	Increase of consumption of <i>mugi</i> koku
1928	8,648,000	8,821,000	3,822,000
1938	18,612,000	18,984,000	8,227,000
1948	30,093,093	30,695,000	13,301,000

The next table shows the future deficit, obtained by adding the present deficit to that caused by the increase of the population.

(1) Shō is a measure of capacity, equal to 1.8039 litres.

	Rice — koku	Mugi — koku
At present (1918)	1,684,000	1,006,000
in ten years (1928)	10,504,000	4,828,000
in twenty years (1938)	20,597,000	9,233,000
in thirty years (1948)	32,379,000	14,307,000

§ 3. AGRICULTURAL PROGRAMME OF THE GOVERNMENT.

To meet the situation that we have been considering, the government has drawn up a programme of supply policy, to be realized in the course of 30 years.

It may be divided into the four following heads :

1. Extension of cultivated land ;
2. Improvement of the land actually under cultivation ;
3. Technical improvement of agriculture ;
4. Importation of rice and *mugi* from Korea and Formosa.

According to the conclusions of the Ministry of Agriculture, the improvement of cultivated land, the technical improvement of agriculture and the importation of rice from Korea and Formosa will not be sufficient to make up the present deficit of national production. The chief remedy is the extension of cultivated land.

In fact, as a first step to the realization of the above programme, the government has determined to bring under cultivation 825,000 chô of land, apart from the 1,300,000 chô of uncultivated land, which after an official inquiry has been declared susceptible of cultivation, situated in the interior of the country, exclusive of Hokkaido.

The remaining area will be reserved for the future. These 825,000 chô are thus divided ;

(a) 250,000 chô of uncultivated land, which it is anticipated will become valuable under the new law for encouraging the breaking up of uncultivated land within the next 15 years :

(b) 150,000 chô of land either neglected or badly cultivated, which within the same 15 years will, it is anticipated, attain its full value under the existing regulations as to the redistribution of cultivated lands, at the rate of 10,000 chô each year ;

(c) after this first period of 15 years, it will be possible to make from 25,000 to 30,000 chô of uncultivated lands attain their full value every year by means of adequate arrangements, according to the necessities of the case, up to a total of 325,000 chô.

Besides in Hokkaido there are 700,000 chô of uncultivated land of which the government proposes to bring under cultivation 620,000 chô at the rate of 26,000 chô per year.

When this programme, in the course of 30 years, has been carried out,

the government anticipates that there will be the following increase of production of rice and *mugi*.

TABLE VIII. — *Estimate of Increased Production of Rice and Mugi through the Extension of Cultivated Land.*

	Japan (exclusive of Hokkaido)		Hokkaido		Total	
	mugi					
	koku	koku	koku	koku	koku	koku
In 10 years	1,762,000	1,211,000	579,000	465,000	2,342,000	1,676,000
In 20 years	4,987,000	3,688,000	1,238,000	1,017,000	6,226,000	4,706,000
In 30 years	8,559,000	6,753,000	1,978,000	1,272,000	10,537,000	8,025,000

According to the government programme, 525,000 chô of land at present cultivated, will be improved and reorganised, besides the million of chô considered susceptible of improvement.

This programme can also be carried out in 30 years at the rate of 30,000 chô annually; it will give the results shown below :

	Rice — koku	<i>Mugi</i> — koku
In 10 years (1828)	1,230,000	160,000
In 20 years (1938)	2,460,000	450,000
In 30 years (1948)	3,383,000	743,000

By the technical improvement of agriculture, the programme will increase the average annual return of rice per tan by 1 shô, therefore in 30 years by 30 shô. The average return of mountain rice per tan would also increase annually by 67 gô (1), that is, in 30 years 2 tô (2). The average increase of the return per tan of *mugi* is estimated at about 1 shô per annum or 3 tô in 30 years.

Through the technical improvement of agriculture the following increased production of rice and *mugi* would be obtained :

	Rice — koku	<i>Mugi</i> — koku
In 10 years	3,845,000	1,980,000
In 20 years	7,402,000	3,780,000
In 30 years	10,999,000	5,580,000

(1) gô a measure of capacity equal to 0.1804 litres

(2) tô a measure of capacity equal to 18.0391 litres

The next table shows at what rate may be calculated the increase of the importation of rice and *mugi* from Korea and Formosa.

	Rice — koku	Mugi — koku
In 10 years.	2,567,000	78,000
In 20 years.	5,134,000	156,000
In 30 years.	7,701,000	234,000

By summing up the increase resulting from the four heads of the agricultural programme given above, we obtain the following :

	Rice — koku	Mugi — koku
In 10 years.	9,983,000	3,914,000
In 20 years.	21,222,000	9,792,000
In 30 years.	32,619,000	14,551,000

The result of the exact carrying out of this programme will be that in 10 years the deficit of rice, and in 20 years that of grain will be completely made up by the increase of home production, leaving besides a not inconsiderable margin for exportation.

The fulfilment of this programme of the Japanese government will not be unattended by difficulties.

In fact, the greater part of the uncultivated land considered capable of improvement is more adapted to dry farming than to wet fields such as rice cultivation requires. The breaking up of such land adapted to dry farming will not greatly assist the solution of the rice question. Further, while the intensive cultivation of fields already cultivated is comparatively easy the development of uncultivated land is very difficult and would require large capital.

In conclusion, the rice supply is the most serious of the national problems of Japan, and the most difficult of solution. Japan will probably be compelled to choose some other article of food as a substitute for rice: a great change is therefore in preparation for the people of Japan in the near future.

SWITZERLAND.

THE RURAL EXODUS: ITS EXTENT AND CAUSES.

SOURCES:

MESURES PROPRES À LUTTER CONTRE LA DÉPOPULATION DES COMMUNES MONTAGNARDES ET RURALES. Rapport au sujet du Postulat Schaer. Présenté au Département fédéral de l'Economie publique par le Secrétariat des paysans suisses. Brougg, 1919.

BERNHARD (Dr. Hans): Stellung der Landwirtschaft zur Innenkolonisation. In: *Mitteilungen der Gesellschaft Schweizerischer Landwirte*. 1920, No. 1.

§ 1. FOREWORD.

Before entering into the problem of the rural exodus in Switzerland, it is necessary to define clearly the phenomenon of the depopulation of the mountain and rural communes.

We may speak of the depopulation of the communes in question in comparison with the increase of the city population. The diminution may be absolute or relative. Absolute when the rural population is diminishing in number; relative when the rural population remains stationary, or increases in a smaller proportion than the urban population, so that its part in the total population is continually diminishing. Considering in this way the phenomenon of depopulation of the country districts, the researches relative to the subject must be extended to the movement of the total population of the rural districts and communes, and therefore must include not only agriculture but also industries and trades carried on in the country.

But the expression depopulation of the country refers in the first place to the diminution of the fundamental element of the rural population, that is, the agricultural population properly so called. The problem may in this case also be regarded from a double point of view, absolute or relative. But in this case also the question must not be limited to the movement of the agricultural population as a whole, but rather as divided into groups. In fact, opinions and remedies must be different, according to whether the diminution of the agricultural population concerns more directly the number of independent agriculturists, that of the members of their families occupied on the same farm, or lastly that of the farm labourers.

§ 2. MOVEMENT OF THE RURAL POPULATIONS AS COMPARED WITH THAT OF THE TOWNS.

From considerations prefixed to the results of the federal census of the population of Switzerland (1) as to the "urbanization" of the country,

(1) *Les résultats du recensement fédéral de la population de 1900 et du 1^{er} décembre 1910.*

it appears that while in 1850 67 per cent of the total population lived in rural communes with less than 2000 inhabitants, this proportion was reduced to only 47 per cent in 1920.

The following table shows that the increase of the population of Switzerland is more rapid in the towns than in the country.

TABLE I. — *Increase of Rural and Urban Population.*

Communes	Resident population			Average annual increase			
				1900 to 1910		1888 to 1900	
	1910	1900	1888	Absolute figures	Per thousand	Absolute figures	Per thousand
With more than 2000 inhabitants	1,972,015	1,674,082	1,358,501	29,793	16.5	26,299	17.6
With less than 2000 inhabitants	1,781,278	1,641,361	1,559,253	13,992	8.2	6,842	4.3
Total for Switzerland . .	3,753,293	3,315,443	2,917,754	43,785	12.5	33,141	10.7

The phenomenon appears more evident if we make a more exact subdivision of the population, viz. by grouping the districts in four classes according to their economic character, thus: 1. towns with more than 10,000 inhabitants; 2. districts essentially industrial exclusive of such towns; 3. mixed districts; 4. agricultural districts.

TABLE II. — *Annual Average Increase of Population in Economic Districts.*

Groups of districts	Average annual increase in the resident population			
	1888-1900		1900-1910	
	Absolute figures	Per thousand	Absolute figures	Per thousand
Towns with more than 10,000 inhabitants	19,243	28.1	19,872	22.0
Districts essentially industrial . . .	9,466	8.1	14,991	11.5
Mixed districts	4,238	5.1	6,350	7.2
Agricultural districts	194	0.5	2,572	6.1
Switzerland . . .	33,141	10.7	43,785	12.5

It is clear for both the periods under consideration that the increase of population is greater the more industrial or urban the district, whether the point of view be absolute or relative.

The chief fact resulting from the two periods of census above referred to, is in every case the important increase of the urban population as compared with the stability of that of the districts which are chiefly agricultural. The great increase of the urban population on the one hand, and on the other the slight increase (a diminution however in 29 districts out of 182 in Switzerland) of the population of rural districts, cannot be explained solely by the fact of the *natural* movement of the population, that is the excess of births over deaths. It is necessary also to consider the *artificial* movement of the population, that is, the excess of immigration over emigration, and *vice versa*. The relation between the natural movement of the population and the artificial modifications it undergoes is shown in the following table in the different economic groups into which the population has been divided for the purpose:

TABLE III. — *Relation between the Natural Movement of the Population and its Modification from Artificial Causes.*

Groups of districts	Annual average diminution or increase per 1000 inhabitants					
	on the total		through excess			
			of births		of immigration or emigration	
	from 1888 to 1900	from 1900 to 1910	from 1888 to 1900	from 1900 to 1910	from 1888 to 1900	from 1900 to 1910
Towns with more than 10,000 inhabitants.	27.8	22.0	9.7	9.9	18.1	12.1
Districts essentially industrial exclusive of the towns above- mentioned.	8.9	11.5	9.2	10.5	0.3	0.9
Mixed districts (except Friburg).	6.6	7.2	8.6	10.4	2.0	3.2
Districts essentially agricultural.	2.5	6.1	7.5	9.6	5.0	3.2
Average	10.7	12.5	8.7			

Of an annual increase of 22 per cent of the urban population from 1900 to 1910, only 9.9 per cent was caused by an excess of births, while 12.1 per cent was owing to the excess of immigration over emigration.

Towns with more than 10,000 inhabitants do not however, owe the increase of population to the natural increase of the number of inhabitants, but much more to foreign and indigenous immigration. Unlike the towns, the population of other groups (except industrial districts in the period 1900-1910) has not increased in proportion to the excess of

births, because in these districts there is a deficit on account of emigration.

This artificial demographic movement, of which the corollary for the urban population is the infusion of new blood brought by immigration from the rural districts, is one of the most important phenomena in the life of the people.

The internal migratory movement in Switzerland between the years of the census gave the following results:

Towns with more than 10,000 inhabitants acquired, by internal migrations, 199,585 more inhabitants between 1888 and 1900, and 229,674 more in the period 1900-1910, than left them for regions of a different economic character.

But all the other districts taken together had a deficit. Although the districts essentially industrial benefited by an excess of immigration from mixed and agricultural regions, yet this fact did not compensate for the loss caused by the emigration of their population to the towns.

Migration into other districts from regions essentially agricultural has taken away a number of inhabitants much greater than that brought by immigration. The total loss in the agricultural regions amounted to 98,381 persons in the period 1888-1900, and to 74,401 in the period 1900-1910.

For every 100 individuals who have left mixed districts and gone to those essentially agricultural, 157 persons in the period 1888-1900, and 145 in 1900-1910 have gone to the mixed districts from the agricultural districts.

For industrial districts the proportion was 100 to 270 in the period 1888-1900 and 100 to 129 in the period 1900-1910. For the towns it was 100 to 581 and 100 to 551 in the two periods respectively. Reversing the proportion we find that for 100 persons who came from the agricultural districts to settle in the towns, there were only 17 in the period 1888-1900 and 18 in the period 1900-1910 who left the towns to settle in agricultural districts. For the mixed districts the proportion was 100 to 26 and 100 to 27 for the two periods respectively and for the industrial districts 100 to 37 and 100 to 43 respectively.

Thus while the towns have benefited by a great increase of population through the immigration from districts of a different character, they have lost but few inhabitants by emigration.

§ 3. THE MOVEMENT OF THE RURAL POPULATION.

The agricultural population of Switzerland has diminished from 1,113,407 in 1880 to 977,928 in 1910, a difference of 135,479 persons in 30 years, or of 121.6 per cent. If we take the period from 1888 to 1910 the diminution was 114,899 persons, that is, the number of the rural population fell from 1,092,827 in 1888 to 977,928 in 1910.

The diminution is equally great whether considered absolutely or relatively.

The extent to which the different classes of the agricultural population have diminished varies considerably, as is shown in Table IV.

TABLE IV. — *Extent to which the Different Classes of the Agricultural Population have Diminished (or Increased).*

Classes of the agricultural population	Number		1888-1910				Share in net diminution per thousand
	1888	1910	Increase absolute	Diminution absolute	Increase per thousand	Diminution per thousand	
Total number of persons employed in agricultural labour	1,092,827	977,928	—	114,899	—	105.1	—
Including males	568,024	525,543	—	42,481	—	74.7	+ 37.0
" females	524,803	452,385	—	72,418	—	137.9	+ 63.0
1. Persons living directly by agriculture	475,089	457,396	—	17,693	—	37.2	+ 15.4
Including males	382,880	356,849	—	26,031	—	67.9	+ 22.7
" females	92,209	190,547	8,338	—	90.4	—	7.3
(a) Independent agriculturists	210,331	208,257	—	2,074	—	9.9	+ 1.8
Including males	187,225	182,649	—	4,576	—	24.4	+ 4.0
" females	23,106	25,608	2,502	—	108.2	—	2.2
(b) Members of the family working on the farm	138,738	153,620	14,882	—	107.2	—	13.0
Including males	92,597	90,785	—	1,812	—	19.5	+ 1.6
" females	46,141	62,835	16,694	—	361.8	—	14.5
(c) Farm labourers	71,247	62,112	—	9,135	—	128.2	+ 8.0
Including males	61,320	56,507	—	4,813	—	78.5	+ 4.2
" females	9,927	5,605	—	4,322	—	435.4	+ 3.8
(d) Day labourers	44,179	30,721	—	13,458	—	304.6	+ 11.7
Including males	35,258	24,406	—	10,852	—	307.7	+ 9.4
" females	8,921	6,315	—	2,606	—	292.4	+ 2.3
(e) Other persons employed	10,594	2,686	—	7,908	—	746.5	+ 6.9
Including males	6,480	2,502	—	3,878	—	605.2	+ 3.3
" females	4,114	184	—	3,930	—	955.2	+ 3.4
2. Persons living indirectly by agriculture	617,738	520,532	—	97,206	—	157.3	+ 84.6
Including males	185,144	168,694	—	16,450	—	88.8	+ 14.3
" females	432,594	351,838	—	80,756	—	186.6	+ 70.3
(a) Domestic servants	16,114	11,021	—	5,093	—	316.0	+ 4.4
(b) Members of the family employed in the care of the household	230,583	175,442	—	55,141	—	239.1	+ 48.0
(c) Adult members of the family not sharing in any profits	27,237	15,052	—	12,185	—	44.7	+ 10.6
Including males	11,998	7,452	—	4,546	—	37.8	+ 4.0
" females	15,239	7,600	—	7,639	—	50.1	+ 6.6
(d) Children	343,804	319,017	—	24,787	—	72.0	+ 21.6
Including males	173,104	161,173	—	11,931	—	68.9	+ 10.4
" females	170,700	157,844	—	12,856	—	75.3	+ 11.2
			19,196	134,095			
			Total increase	Total diminution			

Of all these classes two groups have increased by 19,196 persons, while on the other hand groups in diminution have lost 134,095 persons. The difference between the two figures represents the net loss above indicated, amounting to 114,899 persons.

From this table it results that the class of persons drawing their subsistence directly from agriculture has diminished only by 17,693 persons, and its share in the total loss is only 15.4 per thousand, while the other classes of persons living indirectly by agriculture have diminished by 97,206 individuals or 84.6 per thousand.

The diminution of the agricultural population in Switzerland occurs chiefly among the persons who live indirectly by agriculture, that is, among those who are a charge on agriculture, but do not contribute directly to agricultural production.

It would be very interesting to be able to ascertain whether the above mentioned tendency observed in the movement of the population has continued during the period between the last census (1910) and the present day.

In an article published in No. 186 of the *Neue Zürcher Zeitung* of 6 February 1919, Dr. Hans Müller thinks that certain symptoms indicate a future depopulation of the Swiss towns. The report of the *Secrétariat Suisse des Paysans* also points out certain indications of a future abatement in the "urbanization" of Switzerland. But nothing except the new census of the population of Switzerland now being compiled, can give precise information on the subject.

There is a complete absence of data specially concerning the movement of the agricultural population since 1910. It is only known that the want of labour from which agriculture is suffering is rather aggravated. It may therefore be concluded that the rural population of Switzerland has still further diminished since 1910.

§ 4. INFLUENCE OF THE DIMINUTION OF THE POPULATION ON AGRICULTURAL PRODUCTION.

The ascertained diminution of the rural population of Switzerland does not however mean a diminution in agricultural production. On the contrary production has perceptibly increased in the last 10 or 20 years. The *Secrétariat des Paysans* in fact, after minute calculations, valued it at about 620 millions of francs towards 1895, and 950 millions of francs in 1911, an increase of 330 millions or 53 per cent. in the course of the last 15 or 16 years. Setting aside the increase caused by the variation in prices, there remains a net increase of production of 7 per cent. The proportion between these figures and the working agricultural population is 1,320 fr. of production per head for the first valuation (1895) and 2,130 fr. for 1911.

From these indications it is probable that the part taken by agricultural production in supplying the country with articles of food has dimi-

nished in a smaller proportion than the agricultural population in proportion to the whole population.

The figures given below confirm this supposition :

	Towards 1891	1910 (or 1911)
Total population.	3,116,598	3,753,293
Working agricultural population . . .	469,746	457,396
Percentage of working agricultural population in proportion to the whole population.	15.1 %	12.2 %
Consumption of food by the people of Switzerland	824,000,000 fr.	1,360,000,000 fr.
Value of articles of food produced by Swiss agriculture.	540,000,000 fr.	802,000,000 fr.
Percentage of home production of food in proportion to the total consumption	65.5 %	59.0 %
Total value of food produced by Swiss agriculture	590,000,000 fr.	910,000,000 fr.
Percentage of the entire consumption of articles of food	71.6 %	66.9 %
	Percentage of the working agricultural population of the total population	Percentage out of the total consumption of articles of food of agricultural production of food destined for
		home consumption home consumption and exportation
The middle of the ten years 1890-1900	15.0 %	65.5 % 71.6 %
1910 (or 1911).	12.2 %	59.0 % 66.9 %
Changes:		
of percentages	— 2.9 %	— 6.5 % — 4.2 %
in percentage of the figures relative to the ten years from 1890 to 1900.	— 19.2 %	— 9.9 % — 6.7 %

It is of course not the absolute changes of these figures that must be considered, but only the percentages.

By hard work and a system of intensive production the working agricultural population of Switzerland, though relatively few in number and diminishing perceptibly during the last decades, has nevertheless succeeded in supplying in a proportion from $\frac{2}{5}$ to $\frac{2}{3}$ the need of Switzerland for food products.

It may certainly be admitted that owing to the increase of population on the one hand, and the restriction of consumption on the other, this proportion during the war reached $\frac{3}{4}$ to $\frac{4}{5}$.

§ 5. RECAPITULATION AND CONCLUSION.

The question of rural exodus is a phenomenon of international character.

In every country which has available statistics it is found that the rural population increases less rapidly than that of the towns. The percentage of the rural population of the total number of inhabitants has perceptibly diminished, and almost everywhere the *relative* smallness of the rural population is apparent.

It is only in some countries long cultivated that a depopulation of the country districts in the *absolute* significance of the word has been noted. In Switzerland in 29 districts out of 182 the population has diminished in the period 1880-1910. In some mountain districts the diminution is more perceptible, especially in the Grisons and Ticino; in certain cases the depopulation amounts to one third of the whole population of 1880.

This depopulation is not attributable to diminution of births but to emigration and still more to the exodus into industrial and urban districts. The towns and industrial centres do not in the first place owe their increased population to a higher number of births, but to internal migration. The classification of the population according to occupation and the detailed examination of the movement of the agricultural population, show that it has not increased except in some agricultural countries of recent constitution, while there is a considerable decrease in the majority of industrial States; this deficit is for Switzerland 135,479 inhabitants in the period 1880-1910, or 121.6 per thousand. In nearly all countries the agricultural population has more perceptibly diminished, or at least increased less rapidly than the total number of the population of the country districts; it is therefore clear that in speaking of the depopulation of the country, the expression refers especially to the diminution of the agricultural population considered as the basis of the rural population.

On examining more closely the various classes of the agricultural population (see Table IV) it will be seen that the diminution of 114,899 persons observed in the period 1888-1910, refers for 84.6 per thousand to persons living indirectly by agriculture, that is, those who are not immediately working at the trade of agriculture, but who are supported by it. In some regions hitherto isolated, the changes brought by improved means of communication and the simultaneous introduction of industries have induced many of the female members of the family to adopt occupations other than agricultural. Thus the subdivision "members of the family employed in the care of the household" has been diminished by 50 per cent. on the total diminution.

Though there is no reason to consider as a specially disturbing phenomenon the diminution of persons living indirectly by agriculture, the same cannot be said of the second principal fraction in the diminution of the agricultural population, that which refers to persons employed in agriculture, that is, those auxiliaries of agriculture who work for fixed

wages (sub-divisions *c* and *d* of class 1: *Persons living directly by agriculture*, and sub-division *a* of class 2: *Persons living indirectly by agriculture* of Table IV). Here there is a net loss of 27,686 persons in the period 1888-1910. In the course of 22 years Swiss agriculture has lost more than one fifth of its wage-earners.

Not finding in agriculture a satisfactory position, these persons endeavoured, by changing their trade and migrating, to improve their circumstances both economically and socially. Although this improvement was often more apparent than real, it is and will be in future the principal motive for migration. The number of independent agriculturists is not, however, seriously diminished, and only in cases where land hitherto devoted to agriculture has been taken for building purposes in the neighbourhood of towns or industrial centres. In other parts, the number of independent agriculturists, instead of diminishing, has increased so much that it cannot be said that small rural farms are absorbed by greater ones. Also the number of "members of the family occupied on the farm" (sub-division *b* of class I in Table IV) has increased, which is explained by the want of labour caused by the deficiency of agricultural wage-earners.

In conclusion, *it is the farm which avails itself of the aid of members of the family only, which has shown itself best adapted to resist the rural exodus.*

Migration has not here assumed the character of a deduction from capita¹.

Lastly, it must be observed that the part taken by home agricultural production in the provisioning of the country has been much less diminished than the ratio of the working agricultural population to the total population of Switzerland.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

BULGARIA.

THE COMPULSORY LABOUR LAW. — *Echo de Bulgarie*. Sofia, 9 and 10 June 1920

A law published in the *Officiel* of the 10 June, and bearing date from that day, has made labour obligatory for all Bulgarian subjects, men above twenty years of age, girls above sixteen. Mohammedan girls alone are not subject to this law.

In the terms of the law the object of obligatory labour is: (a) the organization and utilization of social forces in order to increase production and the general well-being; (b) the fostering amongst the citizens, whatever their social and material circumstances may be, of devotion to public affairs and love of bodily labour; (c) the moral and economic improve-

ment of the people by maintaining among them the sense of their duty towards themselves and towards society and by teaching them rational methods of work in every domain of national economy.

Obligatory labour will be utilized in all the domains of national economy as well as in public works, such as: roads, railways, canals, aqueducts, dams, buildings, plans of villages and towns, directing water-courses, draining marshes, planting trees, improvement of forests and plantations of all kinds, the care of silkworms, bee-keeping, stock farming, fishing, etc. The works will be carried out under the direction and on the responsibility of the competent authorities.

The obligation is strictly personal and it is not permissible to send a substitute. Only those who are unfit for any work, physical or intellectual, married women, and men belonging to the army or the police, are exempted.

The duration of the work is 12 months for men, and six months for young girls. The pupils of agricultural or professional schools or other special establishments enjoy an exemption equal to the preparatory duration of the course of compulsory labour. On the other hand a reduction of six months for men and three months for young girls is granted to those who are the support of their families.

Further, in cases of serious damage caused by natural phenomena or of national calamity, every Bulgarian subject of the male sex, from 20 to 35 years of age, may be called, by a decision of the Council of Ministers, to compulsory work in common for a maximum period of four weeks.

The carrying out of the law is entrusted to a Department of Compulsory Labour, which comprises three sections, administrative, technical, and economic. In each section a Council of Compulsory Labour fixes the work and the undertakings requiring labour, the number of workmen, etc. Lastly, for the training of persons subject to the law, the Department will institute technical courses, apprenticeships, schools, workshops, model farms, etc.

The application of the law is enforced by fines up to 10,000 léva, and by other punishments, even a term of hard labour.

FRANCE.

THE REFORM OF THE METAYER SYSTEM IN BAS-ADOUR (LANDES). — *La main d'œuvre agricole*. Paris May 1920.

In the Landes, until 1919, peasants and landowners lived on good terms with each other and their relations, regulated by local custom in virtue of contracts for the most part verbal, had never given rise to regrettable incidents. But in August and September 1919 in consequence of a propaganda undertaken by two metal workers from Boucau (Basses-Pyrénées), who were acting in pursuance of instructions from the General Confederation of Labour, unions of peasants and farm labourers were formed in the region of Bas-Adour, especially in the districts of Saint-Vincent-de-Tyrosse, Souston, and Saint-Martin-des-Seigneux.

Immediately claims were put forward which may be thus summarized : larger participation for the workers in the produce of the farm ; the raising of their standard of living ; suppression of the " dîme " (a custom according to which a tenth part of the harvest was appropriated to the landowner before any division was made between him and the metayer), of compulsory labour and of dues; regulation of the method of farming not according to ancient local custom and verbal contracts now considered obsolete by the workers, but by written contracts which each landowner or the landowners collectively should make with the metayers' union.

The organization of the metayers which made rapid progress and at the beginning of 1920 extended over five districts or twenty-seven communes was not opposed by any organization of landowners. The landowners, seeing in the claims of the metayers an attack on the rights of property, refused to accept them and decided to continue regulating individually their affairs with their own metayers. Besides, as the conditions of labour and the customs of the Bas-Adour varied according to the district, it seemed difficult, if not impossible, for the landowners to accept a general decision which was not applicable in the same degree to each particular case.

In view of this attitude on the part of the landowners the agitation by the unions increased in January 1920. The situation became tenser and on 16 February an incident occurred which caused the struggle to enter upon an active phase. A landowner of Saubrigues, having refused to grant to his metayer the conditions regarding the methods of farming demanded by the union, decided to proceed alone, without the help of the metayer, to thresh the maize crop. There was in consequence a demonstration : 200 persons marched in a crowd through the commune as a protest ; the order to strike was issued to all the neighbouring communes by the President of the Federation as the result of a meeting held on 17 February at Saubrigues by delegates from all the unions of the district.

The movement however did not and could not result in the cessation of work as in the usual conflicts of labour. The relation between landowner and metayer is not the same as that between workman and employer, but rather the relation between associates or fellow-workers. Their action against one another accordingly took the following forms :

(a) Cessation of supplies to the markets of the district. Attempts were made without success to prevent supplies reaching the markets of Saint Vincent-de-Tyrosse and of Dax.

(b) Demonstrations by means of processions.

(c) Posting of placards more or less violent, indicating as modes of action the refusal to pay any dues or to make any division of produce with the landowner.

(d) Forcible opposition to the export of grain by the landowner from the district by erecting barricades on the road to hinder the transit of any vehicle loaded with cereals.

(e) Cessation of all work for the landowner.

In view of the increasing agitation the government was roused. Through the medium of the prefect of Landes, who had hitherto allowed

events to take their course, interfering only to prevent attacks which might be made on the public safety, it tried to persuade the landowners to appoint delegates to negotiate with the delegates of the metayers and to seek a common ground of understanding. This attempt succeeded, and on 14 March an agreement was made between the delegates of the landowners and those of the metayers, concessions being made on both sides, especially by the landowners, having regard more particularly to the following points:

A. *Leases*. Renunciation of verbal agreements and local customs, which for the future must be replaced by leases in writing.

B. *Sharing of Produce*. — (a) *Crops*: Substitution of the old formula: $\frac{2}{5}$ for the landowner, $\frac{3}{5}$ for the metayer, wine equally divided, by the new formula: $\frac{2}{5}$ for the landowner, $\frac{3}{5}$ for the metayer including wine, with an understanding that the share founded on the proportion $\frac{1}{3}$ for the landowner, $\frac{2}{3}$ for the metayer should remain in force where previously established. These variations in the proportion of shares entailed relative variations in the participation of both parties in the expenses of threshing, and supplying seed and chemical manures.

(b) *Cattle*. — In cases where the old agreements gave to each party half the profits accruing from the sale of cattle, and the metayers included in their demands the division into thirds, the agreement allots $\frac{2}{5}$ to the proprietor and $\frac{3}{5}$ to the metayer. On the other hand, when in the old agreements, in the division of profits, no account had been taken of the contribution of the metayer who might share up to the half in the purchase of cattle, the new agreements obliged the proprietor to take into account this share in the purchase, fixing at 5 per cent the interest on the capital employed to be returned to the metayer in the division. The losses sustained follow the new scale of profit-sharing and remain proportional to it.

C. *Compulsory Labour and Dues* — Compulsory labour and dues are abolished, and replaced by money payments, the amount of which is to be fixed by agreement between landowners and metayers. Work done by the metayer on account of the landowner must, contrary to ancient custom, be paid for by the landowner.

D. *Notices to Quit* — Every notice to quit not accepted for reasons connected with the union organization must be cancelled. This is the official recognition by the landowners of the organization of the metayers into unions.

MEXICO.

PROPOSED NEW LIVE STOCK CENSUS. — *Boletín Oficial de la Secretaría de Agricultura y Fomento*. Mexico, September and October 1919.

In Mexico a bill has been brought in for a new census of agriculture and live stock. This census is not to be a mere mechanical enumeration of the cattle in the Republic, but it must by means of accurate investigations give an exact idea of the number of head of stock belonging to each proprietor, and of the condition of stock farming and of the industries connected with

it, in order to furnish to the government the information necessary for timely legislation to promote the increase of stock farming.

The census, which is to be made on the widest principles of investigation and examination, is to show:

(a) the general condition of the live stock in Mexico, and the chief breeds of cattle in the various States and Territories:

(b) The distribution of the cattle and the various forms of the management of cattle with regard to the extent and number of the estates;

(c) the number and value of the cattle according to breed;

(d) the numbers of all the cattle, according to Federal Districts and States;

(e) the number of cattle according to breeds:

(f) the difference, whether increase or otherwise, between the present census and that of 1902.

PALESTINE.

OUTLINES OF A SCHEME OF COLONIZATION. — *Jahrbuch des Bodenreform*, Vol 16, No. 1. Jena, 29 April 1920.

In December 1919 the Zionist Committee in London laid down the fundamental principles of the Jewish colonization of Palestine, extracts from which we here reproduce.

I. *Agricultural Undertakings carried on Directly and with Hired Labour.* — Individuals and groups who intended to found agricultural undertakings in Palestine have hitherto formed themselves into societies called "Achusoth." The idea of the "Achusoth" has, however, changed somewhat in the course of time. Under this designation were at first included societies for the cultivation of citrus fruits, with labour usually hired. But of late those groups were formed into "Achusoth" who wished to found in Palestine small colonies depending chiefly on the individual labour of the colonist.

These two economic forms are so different from the point of view of national colonization that they must be kept quite distinct. By "Achusoth" must be understood those societies which seek to plant citrus groves, the cultivation of which would be chiefly dependent on hired labour.

But those persons whose enterprises depend essentially on their own individual labour, that is, true peasants, must leave the federations of "Achusoth," and form special associations to be in future called "Meschek."

II. *The "Achusoth."* — The ultimate object of land policy should be to carry out the purchase of the entire Jewish land and to portion it out through the Jewish National Fund. For the moment, however, the purchase of land by private individuals cannot be relinquished, but every effort should be made that this private property in land should be strictly in accordance with the economic principles of future national colonization. From this conception are for the most part derived the following principles for the formation and economic character of the "Achusoth."

1. The contribution payable for membership in an "Achusa" must be sufficient to maintain a family in Palestine, and should be calculated at about £2000. The payment may be made by instalments, provided that £800 be paid when the society for the purchase of the land is formed and the remainder in four successive annual instalments.

2. In view of maintaining a co-ordinated land policy, the purchase of land must be made through a central Zionist office which shall choose the land in agreement with the "Achusa." Care must be taken that the farms of the "Achusa" shall be situated as far as possible in zones naturally adapted to cultivation, and that the central portion of the land selected shall be purchased by small colonists, so that in the centre of the colony there may be a predominance of Jewish colonists cultivating the land by their own labour. In this way it may be made permanently possible to carry on the work of the "Achusa" with Jewish labour.

3. Until the farm begins to be profitable, the "Achusa" should represent a kind of co-operative society for the management of the land. It should cause the preparatory work for planting to be done by Jewish labour, especially by groups of labourers, which, by the formation of well organized banks may be placed in a position to ensure to themselves the necessary working capital, and to act as corporate bodies. Besides wages, the labour contract provides for the payment of a premium, so that it may be possible for the members of groups of labourers to improve their economic condition. The most appropriate form of premium is the concession of an allotment in a plantation already completed. The National Jewish Fund will in such cases provide for the purchase of the land in which this allotment is situated, and will place the purchase money at the disposal of the group of labourers who will thus have the working capital necessary to instal themselves as small holders cultivating the land with their own labour.

The regulation of the relations between the capitalist farmers, the administration of the "Achusa" and the labourers will be established as may be most expedient by the Labour Bureau which it is proposed to form.

4. Before a citrus grove is in a condition to yield a profit, it is estimated that a period of five to seven years from the beginning of the work must elapse. The members of an "Achusa," if they have no contract with the society of the "Achusa," and are working for it as salaried managers, must not establish themselves in Palestine until the grove begins to be profitable unless they have sufficient means to support them in the meantime, or unless they have some other profitable occupation in the country.

5. When the grove is completely planted, though it may be managed by individual members of the "Achusa," preference should be given to groups of solvent labourers.

6. For individual labourers who are not registered in any "Achusa," but who may wish to settle independently on the land, the principle of the "Achusoth" with relative adaptations holds good.

III. *Meshek*. — The Jewish national agricultural colonization is founded on a system of small direct cultivators. The colonists, if not already farm

labourers, must become accustomed to agricultural work before settling on the land. In deciding the question of adaptability the age of the candidate is an important factor ; persons between the ages of 18 and 30 should have the preference. From this test all those who have been occupied in agriculture in the countries whence they have emigrated are naturally exempted, as being in a position to adapt themselves in a short time to the special conditions of Palestine. As regards other matters the following regulations are in force :

1. The dimensions of the holding must be so determined that the colonist and his family may by their own labour derive a sufficient profit from it. The land must, if possible, be devoted to mixed farming, especially to the cultivation of vegetables and field produce and to dairying. In cases where the colonist desires to have citrus groves the land must be entirely devoted to cultivation for domestic requirements, so that he may be able to supply himself as far as possible with all the agricultural produce he needs.

2. The land on which small colonies are settled must be let to the colonist on a long lease. The rent, the duration of the lease, etc. must be fixed so as to secure the development of the holding on sound lines.

3. The capital which the colonist is expected to pay must be fixed at a minimum contribution of £200, payable by instalments. He must not be allowed to enter on the holding until this payment has been made. The members of the "Meschek" who are not in a position to pay this sum before going to Palestine, must be enabled to pay it by degrees, either from their savings or by premiums to the amount necessary, during the time in which they are employed in preparatory work or in planting the citrus groves of the "Achusoth" or in putting in order the lands of the National Fund.

4. Members of the "Meschek" may be permitted to settle on holdings after they have had a sufficient period of preparation as agricultural labourers in Palestine.

IV. *Agricultural Credit*. — The Agricultural Credit Institute to be established must first of all introduce mortgage credit for colonists who directly cultivate the land. Not until this is done may credit for "Achusoth" be taken into consideration. Also as regards the amount of loans, the interest on mortgages and the instalments of repayment those colonists who directly cultivate the land must have the preference.

V. *Co-operative Colonization by Labourers*. — If groups of men occupied in preparatory labour show a tendency towards co-operative colonization; such an inclination should be encouraged with the greatest care. The question, after considering the facts of the case, must be treated according to the experience in the matter acquired in Palestine.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

The Institute is a government institution in which each country is represented by delegates. It is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert) (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933 $\frac{1}{64}$ d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5 $\frac{1}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933 $\frac{1}{64}$ d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753 $\frac{1}{64}$ d.	at par
1 Franc (100 centimes) (France)	=	933 $\frac{1}{64}$ d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	983 $\frac{1}{64}$ d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933 $\frac{1}{64}$ d.	at par
1 Lira (100 centesimi) (Italy)	=	933 $\frac{1}{64}$ d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	933 $\frac{1}{64}$ d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	28.261 $\frac{1}{64}$ d.	at par
1 Milreis, gold (Portugal)	=	48.519 $\frac{1}{64}$ d.	at par
1 Pesetas, gold (100 centimo) (Spain)	=	933 $\frac{1}{64}$ d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	38.1137 $\frac{1}{64}$ d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.013 $\frac{1}{64}$ d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	28.1 $\frac{1}{8}$ d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	48.111 $\frac{1}{32}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	28.037 $\frac{1}{64}$ d.	at par
1 Zentner (Germany)	=	112.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

GERMANY.

AGRICULTURAL CREDIT SOCIETIES DURING THE WAR.

SOURCES:

JAHRBUCHER DES REICHSVERBANDES DER DEUTSCHEN LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN FÜR 1914, 1915, 1916, 1917 UND 1918. Jahrgänge 21, 22, 23, 24 und 25. Berlin, 1915, 1916, 1917, 1918 and 1919.

In our last issue we described the general development of German agricultural co-operative societies during the war. We will now analyse the several forms of co-operation, beginning with the agricultural credit societies (*Spar- und Darlehenskassen*), which, as we shall see form much the largest group of German co-operative societies.

8. THE GROWTH OF AGRICULTURAL CREDIT SOCIETIES DURING THE WAR.

The tendencies which were made manifest during the war in the growth of the co-operative movement as a whole are of course also noted when we come to consider the agricultural credit societies, though in a somewhat attenuated form, yet clearly enough to be no exception to the rule. This can be seen from their numerical increase. Thus the number of newly formed banks even in the first year of the war fell consider-

ably behind the number for the pre-war years. In the last five years before the war the new co-operative credit societies were as follows:

438	from	31	May	1909	to	1	June	1910
533	»	»	»	1910	»	»	»	1911
841	»	»	»	1911	»	»	»	1912
528	»	»	»	1912	»	»	»	1913
506	»	»	»	1913	»	»	»	1914

The number of new societies formed each year thus averaged 500, whereas in the first year of war, or rather from 31 May 1914 to 1 June 1915, the number was only 112. The number of societies dissolved in the same period was:

53	in	1909-10	49	in	1912-13
60	»	1910-11	65	»	1913-14
57	»	1911-12	31	»	1914-15

The net increase, after deducting the number of the societies which were dissolved from the number of new ones, thus amounted to 81 for the last year. If we deduct from this number the net increase in the two months of peace, June and July 1914, i. e. 43 (54 newly organized and 11 dissolved) we get for the first year of war a total of only 38 new co-operative credit societies, which, when compared with the increase during time of peace, gives the following results:

<u>Years</u>	<u>Net Increase</u>	<u>Year</u>	<u>Net Increase</u>
1909-10	385	1912-13	479
1910-11	473	1913-14	441
1911-12	784	1914-15	38

These figures do not show an actual shrinkage, nor an arrest, but the relative increase in the number of credit societies is small and can only be explained by the general conditions of war economy referred to in our previous article.

The subsequent war years, more especially the last, indicate how-

ever a considerable improvement in this respect as can be seen by the following data :

Years	New Societies	Dissolutions	Net Increase
1915-16	III	24	87
1916-17	II3	29	84
1917-18	285	34	251

Thus the increase for the last year was almost 7 times as great as during the first war year, this being the result of growing activity in forming new societies, the number of societies which were dissolved remaining almost stationary.

The number of credit societies as compared with the total number of co-operative societies for the five years 1913-14 to 1917-18 is as follows :

Years	Number of agricultural co-operative societies	Number of co-operative credit societies
1913-1914	28,318	17,696
1914-1915	28,555	17,777
1915-1916	28,752	17,864
1916-1917	29,082	17,948
1917-1918	29,609	18,199

We thus see that agricultural credit societies account for almost two thirds of all German co-operative agricultural societies.

For the five year period under consideration the credit societies are classified in accordance with the nature of their liability in the manner set forth in Table I.

TABLE I. — *Nature of the Liability of Cooperative Credit Societies from 1913-14 to 1917-18.*

Years	Unlimited liability		Limited liability		Unlimited liability to make supplementary payments		Total
	No.	%	No.	%	No.	%	
1913-14	16,282	92.0	1,393	7.9	21	0.1	17,696
1914-15	16,332	91.9	1,424	8.0	21	0.1	17,777
1915-16	16,417	91.9	1,426	8.0	21	0.1	17,864
1916-17	16,500	91.9	1,427	8.0	21	0.1	17,948
1917-18	16,736	91.9	1,442	8.0	21	0.1	18,199

TABLE II. — *Territorial Distribution of Credit Societies for the period 1913-14 to 1917-18.*

States and territories	No. of Co-operative Credit Societies				
	1 June 1914	1 June 1915	1 June 1916	1 June 1917	1 June 1918
Prussia:					
Prussia East	426	426	425	425	426
Prussia West	309	309	309	308	307
Brandenburg	842	845	849	853	872
Pomerania	588	593	592	597	615
Posen	611	616	616	615	615
Silesia	1,747	1,755	1,768	1,772	1,804
Saxony	769	770	769	769	773
Schleswig-Holstein	379	387	388	386	389
Hanover	534	538	552	567	574
Westphalia	500	501	499	501	502
Hesse-Nassau	837	851	869	891	927
Rhine	1,500	1,505	1,519	1,529	1,533
Hohenzollern	50	51	51	51	51
Total Prussia	9,092	9,147	9,206	9,264	9,390
Bavaria:					
Right bank of Rhine	3,688	3,712	3,725	3,729	3,758
Left bank of Rhine (Palatinate)	496	495	495	495	497
Total Bavaria	4,184	4,202	4,220	4,224	4,255
Saxony	341	343	344	344	332
Württemberg	1,350	1,353	1,354	1,357	1,361
Baden	568	570	569	569	571
Hesse	497	489	494	493	493
Mecklenburg-Schwerin	135	139	144	162	196
Mecklenburg-Strelitz	17	17	17	19	28
Saxony-Weimar-Eisenach	134	134	134	135	151
Oldenburg	138	138	138	138	137
Brunswick	159	160	161	160	164
Saxe-Meiningen	58	58	58	59	70
Saxe-Altenburg	51	51	52	53	53
Saxe-Coburg-Gotha	69	69	69	69	70
Anhalt	37	37	37	36	38
Schwarzburg-Sondershausen	29	28	28	28	29
Schwarzburg-Rudolstadt	21	21	22	21	28
Waldeck	43	43	43	42	42
Reuss, Elder Branch	8	8	9	9	11
Reuss, Younger Branch	15	15	15	15	15
Schaumburg-Lippe	2	2	2	2	2
Lippe	13	13	13	13	13
Lübeck	3	3	3	3	3
Bremen	2	2	2	3	3
Hamburg	6	6	6	6	6
Alsace-Lorraine	724	724	724	724	722
Total Germany	17,696	17,777	17,864	17,948	18,199
German Colonies (1)	2	2	2	2	2
Foreign countries: Palestine (2)	1	1	1	1	1

(1) The "Deutsch-Südwestafrikanische Genossenschaftsbank e. G. m. b. H." at Windhoek and the "Spar- und Darlehenskasse e. G. m. b. H." at Gibeon. — (2) The "Darlehenskasse der evangel. Gemeinde Jaffa" in Jaffa, founded by German colonists.

This shows that over 90 % of the credit societies adopt unlimited liability; then come, though at a great distance, the limited liability societies, and lastly, in a very small number, 0.1 %, those which assume unlimited liability to make supplementary payments. These percentages are much the same as those we found prevailing in the case of agricultural co-operative societies in general.

The distribution of the credit societies in the several States of the Confederation and in the several provinces during the war is given in Table II.

As can be seen from Table II no notable alterations took place during the war in the number of credit societies in the several States and provinces. Prussia keeps at the head of the list, followed by Bavaria, Württemberg, Alsace-Lorraine, Baden, etc. The lowest numbers are those for Hamburg, Bremen, Lübeck, and Schaumburg-Lippe. In Prussia the first place is held by Silesia, followed by the Rhine Province, Brandenburg, etc.; at the bottom of the list comes Hohenzollern.

The data so far given for annual increase, number in each year, nature of liability, and territorial distribution of credit societies relate to all the societies existing in the territory of the German Confederation. The statistical data which will be given below refer only to some of these societies — the largest group — i. e. those which are members of the National Federation (*Reichsverband*) and which have sent to that body their annual reports. Table III shows the numerical importance of this group of societies.

TABLE III. — *Number of Societies belonging to the National Federation and which have sent in to it their Annual Reports.*

Year	Total number of co-operative credit societies	Number belong- ing to the Federation	Reports sent in
1 June 1914	17,696	9,477	9,326
» 1915	17,777	11,281	11,165
» 1916	17,864	11,625	11,555
» 1917	17,948	11,634	11,339
» 1918	18,199	11,657	11,320

This shows that two thirds of the total number of agricultural credit societies belong to the National Federation and send in detailed reports of their work. Their general situation and business therefore affords a fair idea of the general position of all the existing agricultural credit societies.

The oldest of the credit societies sending in reports dates back to 1846,

TABLE IV. —

Federation	1914			1915		
	Total amount	Average		Total amount	Average	
		per society	per member		per society	per member
Ermland	525,763	7,511	38	533,372	7,620	
Brandenburg	2,079,171	4,158	78	2,219,760	4,413	
Pomerania	601,571	1,457	21	765,614	1,756	
Posen I.	2,665,314	8,592	75	2,837,794	9,066	
" II	263,706	1,345	19	285,281	1,534	
Silesia I.	1,590,657	2,034	25	1,665,833	2,049	
" II	507,187	1,542	14	555,313	1,682	
Saxony	1,365,814	1,905	34	2,610,105	3,600	
Schleswig-Holstein	766,746	2,087	31	832,176	2,219	
Hanover	781,801	1,391	15	854,832	1,737	
Westphalia	398,770	733	4	407,581	745	
Kurhessen.	289,491	3,760	42	274,193	3,608	
Nassau	1,156,024	9,175	75	1,134,721	8,864	
Rhenish Prussia I (Bonn)	2,272,233	18,033	127	2,502,165	19,548	
" II	585,298	1,056	104	507,729	945	
" III	—	—	—	—	—	—
<i>Kingdom of Prussia.</i>	15,849,546	2,830	30	17,986,469	3,187	33
Upper Bavaria	329,939	760	9	346,446	798	10
Lower Bavaria	265,748	886	8	263,664	847	8
Upper Palatinate	256,065	952	11	257,209	963	11
Oberfranken.	176,484	687	9	177,685	667	9
Mittelfranken	95,646	719	9	96,374	708	
Unterfranken	461,775	875	11	445,569	858	10
Schwaben.	387,254	725	9	399,807	743	9
Palatinate.	1,482,592	8,532	58	1,509,364	5,631	58
<i>Bavarian Federation (Munich).</i>	3,455,503	1,269	15	3,496,118	1,275	15
Kingdom of Saxony	1,072,427	3,459	54	1,227,099	3,823	59
" of Württemberg	—	—	—	3,005,243	2,319	20
Grand-Duchy of Baden I (Karlsruhe).	21,834	1,820	23	23,429	1,952	26
Grand-Duchy of Baden II (Friburg)	—	—	—	5,802,112	12,532	
Grand-Duchy of Hesse	6,486,165	18,323	152	3,443,861	9,868	83
" of Mecklenburg	32,818	887	25	38,615	1,043	30
" of Oldenburg	78,105	1,055	9	9,493	1,046	7
Alsace-Lorraine	94,169	436	7	89,065	369	7
<i>German Confederation.</i>	27,072,567	2,903	32	35,191,504	1,152	33

(in marks)

1916			1917			1918		
Total amount	Average		Total amount	Average		Total amount	Average	
	per society	per member		per society	per member		per society	per member
555,268	7,932	42	568,495	8,121	42	590,434	8,435	45
2,372,089	4,725	87	2,582,506	5,116	94	2,964,047	5,881	104
795,662	1,817	25	805,948	1,836	25	929,100	2,079	28
2,998,112	9,579	85	3,174,975	10,176	92	3,423,370	11,007	98
350,656	1,797	26	432,746	2,101	38	659,668	3,266	48
1,707,058	2,136	27	1,757,796	2,198	28	1,841,901	2,305	29
582,291	1,764	16	651,978	1,607	17	728,427	2,201	19
3,051,697	4,221	74	3,185,701	4,406	76	3,429,718	4,723	80
893,227	2,363	34	969,877	2,559	37	972,595	2,594	38
869,889	1,736	17	911,331	1,792	16	968,421	1,868	18
421,047	772	4	422,287	771	4	434,116	602	5
258,155	3,528	39	265,456	3,492	39	273,099	3,641	41
1,139,376	8,567	74	1,137,600	8,751	74	1,219,218	9,237	80
2,527,990	10,597	137	2,629,029	20,068	143	2,708,304	21,132	149
657,926	1,188	11	527,097	976	9	697,722	1,266	12
688,389	1,885	17	778,078	2,036	20	889,297	2,570	23
19,875,437	3,277	34	20,801,900	3,422	36	22,789,437	7,768	39
316,314	748	10	352,361	890	11	309,457	841	10
305,807	983	10	250,105	802	9	248,716	898	9
248,092	947	11	228,533	1,039	11	230,541	1,026	11
176,371	665	9	173,129	807	9	167,141	730	9
93,683	688	10	96,157	751	10	62,392	347	7
467,377	416	11	425,238	1,019	12	438,924	1,068	13
392,990	733	9	382,200	759	9	374,118	708	9
1,506,596	5,643	61	1,527,708	5,898	63	1,573,290	6,051	65
3,507,230	1,294	15	3,470,431	1,397	16	3,404,579	1,141	17
1,365,933	4,242	63	1,470,452	4,567	66	1,599,873	4,953	69
3,116,134	2,403	20	3,288,57	2,498	21	3,431,243	2,683	23
25,020	2,087	28	27,188	2,472	33	31,180	2,835	38
6,080,322	13,076	88	6,120,799	13,163	90	6,463,323	13,960	97
3,078,102	8,948	62	3,435,557	9,788	89	3,315,225	10,29	95
41,311	1,033	31	60,796	1,447	41	83,897	1,974	53
108,032	1,440	12	116,644	1,535	13	124,581	1,684	14
90,450	400	7	92,218	437	8	—	—	—
7,287,966	3,225	34	38,824,832	3,424	35	41,243,338	3,774	39

and is therefore more than 70 years old. The credit societies developed most rapidly during the ten years from 1896 to 1905. In the last year to which the reports refer 75 societies (0.6 %) had only existed for one or two years.

The membership of these banks numbered 847,203 in 1914; 1,090,910 in 1915; 1,109,756 in 1916; 1,098,746 in 1917 and 1,104,032 in 1918. The smallest membership was that of a Brandenburg society (7 members) and of one in Saxony (8 members); the largest (1,598) was that of a society in the district of the Bonn Federation in 1918. The average membership for the whole country fluctuated during the war between 96 and 98 persons.

§ 2. THE LIABILITIES OF THE AGRICULTURAL CREDIT SOCIETIES.

Let us now consider the activities of these agricultural credit societies during the war and the volume of their business so as to see if and what modifications the war brought about in their internal development. The figures will refer as before to those societies which belong to the National Federation and have sent in their annual reports. Let us first glance at the liabilities, the amount of money which the societies had available.

These liabilities, which represent the working capital, varied from year to year during the war, both in actual amount and in the relative value of its constituent parts.

1. The owned capital consists of members' shares and of the reserve. The value of members' shares and the average per society and per member is given for the several federations adhering to the National Federation at the close of the several financial years in Table IV.

Table IV shows an increase in the amount of shares, which rose from 27,972,567 marks in 1914 to 41,243,338 marks on 1 June 1918. The average per society rose during this period from 2,903 to 3,774 marks, and that per member from 32 to 39. Nevertheless the members' shares are still quite low in the case of the majority of the federations. The highest total amounts are those of the following federations: Brandenburg, Posen I, Rhenish Prussia I, Baden I, and Hesse. During the war Hesse, which in 1914 held the first place for members' shares, the amount being 6,486,165 marks, lost this position in 1918 in favour of Baden II, which could boast the sum of 6,463,923 marks, whereas in that year Hesse only showed 3,315,225 marks. The highest amount per society and per member was attained in Rhenish Prussia I, where it rose from 18,922 marks per society and 129 marks per member in 1914 to 21,132 marks per society and 149 marks per member in 1918.

The second constituent factor in the capital belonging to the societies, consisting of reserve funds and business reserves amounted at the close of the several years for the whole of Germany to the sums set forth in Table V.

TABLE V. — *Reserve Funds and Business Reserves (in marks).*

Years	Total amount	Average	
		per society	per member
1914.	50,624,712	5,428	60.
1915.	62,758,127	5,621	61
1916.	71,135,136	6,149	64
1917.	78,048,699	6,885	71
1918.	85,523,103	7,945	81

These figures show that this capital, both total amount and average per society and per member, is double that of the members' shares. If these two capital funds are summed together the following results (Table VI) are obtained which show the total amount of the working capital belonging to the societies at the close of the several business years.

TABLE VI. — *Owned Capital (in marks).*

Years	Total amount	Average	
		per society	per member
1914.	77,697,279	8,331	92
1915.	97,949,631	8,773	90
1916.	108,423,102	9,375	98
1917.	116,893,531	10,309	106
1918.	126,766,441	11,604	119

The figures, it will be seen, represent no small amounts: the owned capital of these credit societies during the war far exceeded 100 million marks. But if this capital is compared with that borrowed from outsiders the percentage is seen to be unfavourable to the former, as we shall see later on.

2. Borrowed capital, consisting of savings deposits, deposits on current account, and loans obtained from the Central Banks, attains for the several heads the figures given below. We give first the data for the most important head, that of savings deposits, showing the amounts se-

TABLE VII. — *Savings*

Federations	1914		1915	
	total amount	average per society	total amount	average per society
Ermland.	40,013,841	614,473	46,243,801	660,626
Brandenburg.	39,351,280	78,703	42,674,433	84,840
Pomerania	39,941,779	96,711	43,358,303	99,446
Posen I	30,074,067	97,013	31,450,893	100,482
" II	12,400,652	63,269	11,688,987	62,844
Silesia I.	59,736,068	76,389	63,207,176	79,608
" II.	55,240,741	168,513	58,199,311	176,362
Saxony	54,932,693	76,615	59,977,253	73,072
Schleswig-Holstein.	35,688,620	97,244	39,385,813	105,029
Hanover	125,902,598	256,944	138,588,845	281,684
Westphalia	238,120,211	437,721	254,645,157	465,531
Kurhessen	11,875,812	154,231	12,411,407	163,307
Nassau	18,163,499	144,155	18,619,821	145,464
Prussia Rhenish I.	51,931,059	412,151	54,374,864	424,804
" II	88,960,402	160,578	92,499,430	172,252
" III	—	—	—	—
<i>Kingdom of Prussia.</i>	905,333,362	161,638	967,325,694	171,390
Upper Bavaria	56,087,117	129,233	58,697,143	135,247
Lower Bavaria	42,590,321	141,968	45,555,772	146,481
Upper Palatinate	24,819,285	92,265	35,518,740	133,029
Oberfranken	30,300,913	117,902	32,370,501	121,692
Mittelfranken	19,810,751	148,953	21,953,578	161,423
Unterfranken	58,186,203	110,201	60,104,890	115,142
Schwaben.	73,245,845	137,165	79,950,048	148,606
Palatinate	21,517,416	80,289	22,656,945	84,541
<i>Bavarian Federation (Munich).</i>	326,557,851	119,926	356,807,617	130,127
Kingdom of Saxony	32,098,961	103,545	37,138,367	115,696
" of Württemberg	—	—	104,391,467	80,548
Grand-Duchy of Baden I	519,694	43,308	628,880	52,407
" II.	—	—	83,838,391	181,076
" of Hesse	82,998,672	235,124	83,372,346	238,889
" of Mecklenburg	2,778,014	75,081	2,920,133	79,193
" of Oldenburg	10,621,032	143,527	12,382,795	162,932
Alsace-Lorraine	10,734,559	49,697	10,903,112	48,458
<i>Germany.</i>	1,371,642,145	147,077	1,659,708,802	148,661

Deposits (in marks).

1918

Total amount	Average per society	Total amount	Average per society	Total amount	Average per society
51,978,948	742,556	53,821,450	768 877	64,454,258	920,775
43,516,879	86,807	48,471,845	96,365	66,356,993	131,661
46,710,033	107,133	49,413,126	112,558	63,534,647	143,744
32,392,654	105,171	35,833,504	114,851	46 069,699	150,064
16,858,109	83,456	19,830,553	96,264	25 902,593	128,868
63,946,740	80,033	69,353,526	86,692	89,468,200	111,835
60,161,193	182,307	62,406,326	188,538	80,751,048	246,192
64,225,533	89,575	73,109,209	101,105	95,977,462	132,200
41,894,471	113,844	58,724,184	154,945	55,004,814	149,065
147,263,213	297,501	169,120,560	332,264	213,780,044	421,167
277,907,726	518,989	302,643,500	550,444	385,906,341	704,206
12,970,485	172,940	13,826,067	181,922	17,127,817	228,371
18,959,852	154,145	20,981,609	161,396	25,401,002	196,907
55,536,945	433,822	57,798,921	440,831	68,992,245	522,669
106,648,085	191,259	117,012,030	216,688	158,093 622	286,401
68,795,948	189,000	76,643,531	200,637	96,321,180	279,192
1,109,766,814	184,320	1,228,989,941	202,170	1,553,141,905	257,484
66,602,303	166,091	80,499,622	203,282	98,934,087	269,575
62,279,605	205,543	72,880,665	253,939	93,353,970	341,223
44,086,663	179,946	49,220,908	223,726	65,947,215	308,165
39,575,808	160,226	47,381,954	193,396	59,892,922	259,277
23,301,916	192,578	26,291,399	205,401	28,097,195	253,128
70,488,028	148,084	76,618,602	174,816	98,941,534	243,300
100,035,767	191,638	120,044,086	256,846	147,518,707	302,292
24,492,564	93,483	27,116,689	104,697	37,066,995	143,116
430,862,654	167,195	500,053,865	201,229	629,752,625	268,208
41,351,347	129,625	51,167,266	158,905	70,416,319	220,741
115,229,434	89,256	122,955,856	94,801	150,126,950	118,024
778,539	64,878	937,619	85,238	1,267,391	115,217
91,102,764	195,920	99,078,558	213,072	123,833,765	268,038
80,323,021	234,863	87,181,221	248,379	107,852,767	305,532
2,959,252	77,875	3,516,446	83,724	4,787,061	113,978
15,417,122	226,722	18,979,544	249,731	29,201,470	423,210
12,735,974	61,231	14,475 429	68,603	—	—
1,900,526,921	167,572	2,127,335,745	187,612	2,670,379,893	244,804

parately per federation in giving the totals and the average per society (Table VII).

The amount of savings deposits thus exceeds 2,500,000,000 marks for the last year, and is therefore much more considerable than the total amount of the owned capital of the agricultural credit societies. The first place in the Confederation as far as savings deposits are concerned is held by Westphalia (385,906,341 marks); then come Hanover with 213,870,044 marks, Rhenish Prussia II with 158,093,622 marks, etc. The highest average per society is attained in the last year in the Ermland (920,775 marks) followed by Westphalia (704,209 marks), Rhenish Prussia I (422,699 marks), etc. The value of savings deposits rose during the war both absolutely and relatively. The increase amounted to 543 millions of marks in 1918 as compared with 227 in 1917, 172 in 1916, 100 in 1915 (this comparison does not take into account the Federations which affiliated themselves in the interval with the National Federation bringing 188 million marks of savings deposits). This notable and steady increase in the amount of savings deposits is explained by the amount of working capital left uninvested in agriculture owing to the war. The deposits were largely invested in war loans. During the war the confidence which the people had in the agricultural credit societies was clearly shown by the increase in savings deposits, and this fact bears witness to the extraordinary political and social importance of the agricultural, financial and credit organisations for all classes of farmers.

The deposits in current account figure in the total of liabilities for a smaller amount than the savings deposits. Their total and the average per society and per member is shown in Table VIII.

TABLE VIII. — *Deposits in Current Account (in marks).*

Years	Total amounts	Average	
		per society	per member
1914.	204,179,221	31,514	337
1915.	240,028,734	30,667	309
1916.	322,961,816	40,532	411
1917.	429,802,614	50,708	1,366
1918.	616,352,057	71,367	756

As a set-off to this steady increase both in savings deposits and in deposits on current account is the growing decrease in the indebtedness of the credit societies to their Central Banks, as shown by Table IX.

TABLE IX. — *Indebtedness of the Agricultural Credit Societies to the Central Banks (in marks).*

Year —	Amount —
1914	135,352,475
1915	115,181,788
1916	82,264,544
1917	60,161,264
1918	34,402,050

Thus the total indebtedness has decreased considerably since 1914, a fact which must be considered in relation to the unusual abundance of money. This class of liabilities, even before the war, was constantly declining in importance as compared with the total working capital, thus showing that the financial strength of the local credit societies depended essentially on the resources — especially on the savings deposits — derived from their own districts.

The total borrowed capital, consisting of the sum total of the several forms of capital we have examined, is set forth for the war years in Table X.

TABLE X. — *Total Amount of Borrowed Capital held by the Credit Societies from 1914 to 1918 (in marks).*

1914	1,711,173,841
1915	2,014,919,324
1916	2,343,862,627
1917	2,661,460,033
1918	3,373,316,761

If we compare the actual figures for borrowed capital with those given above for the owned capital on the one hand and the total capital from all sources on the other, we obtain the following percentages :

Years —	Borrowed capital %	Owncd capital %
1914	95.4	4.6
1915	95.6	4.4
1916	95.8	4.2
1917	95.8	4.2
1918	96.4	3.6

These figures show a steady deterioration in the relation between the capital owned by the banks and the borrowed capital, a phenomenon which must certainly be deemed unfavourable from the standpoint of the solvency of the credit societies. The position can only be improved by increasing the members' shares and subsidiary payments, which could be done without entailing any heavy sacrifice in view of the increased financial potentiality of the agricultural population.

The total amount of borrowed capital and of capital owned by the credit societies forms the total liabilities, the whole of the working capital, which during the war years has attained the figures shown in Table XI.

TABLE XI. — *Amount of Liabilities from 1914 to 1918.*

Year —	Marks —
1914	1,826,804,768
1915	2,146,374,954
1916	2,452,285,729
1917	2,778,353,564
1918	3,500,183,202

It is evident that the working capital, the liability of the co-operative credit societies, shows a steady and notable increase. For the last year it attained the huge sum of 3,500,000,000 marks.

§ 3. THE ASSETS OF THE AGRICULTURAL CREDIT SOCIETIES.

We have examined the total financial means at the disposal of the credit societies, the amount of the several forms of capital, their origin, their ratio to each other. We will now enquire into the use made of this

capital, the assets of the societies during the war years, so as to determine, by comparing it with the liabilities and on the basis of the difference between the two, the profits or losses of the societies.

The main asset consists in the money lent to members, and more especially in the loans for definite periods. The sums paid in current account form almost half of these loans. Table XII shows the total loans made to members during the war years for each single federation and the average amount of loans per society and per member.

The above table shows that the loans made for fixed periods or on current account are highest for the Westphalian Federation (352,700,446 marks) followed at a considerable distance by Hanover (113,159,039 marks), Württemberg (96,667,859 marks), etc. The highest average per credit society and per member is that for the Ermland with 705,524 marks and 3,774 marks respectively; the lowest for Baden with 42,405 marks and 588 marks respectively. The total amount of loans increased somewhat during the war but remained well behind the growth of borrowed capital during that same period. This is evidence of the restricted need of credit of the farming population during the war years, years during which the money which flowed in from the farms to the societies exceeded the demand for loans.

Another asset of the credit societies are their credits with the Central Banks. This asset grew during the war from year to year in a notable degree and grew constantly as compared with their indebtedness to the Central Banks. In this respect the difference from peace years is remarkable. In 1914 these credits amounted to 199 millions of marks and the indebtedness to 135.3 millions; with a margin in favour of the credits of 63.7 million marks. In 1915 the credits rose to 277 million and the debts to 108 million marks so that the margin rose to 169 million marks. In 1916 this tendency continued and the credits rose to 474 millions while the debts fell to only 82 million marks so that the credits exceeded the debts by 392 million marks. In 1917 the credits rose to 730 millions and the debts fell to 60 million marks so that the margin of credits over debts rose to 730 million marks. Finally, in 1918 credits amounted to 1,160 million marks and debts shrank to 34 millions thus showing a margin of 1,126 million marks in favour of credits. The credits have thus grown six-fold and the debts shrunk to one fourth of their former amount during the war, so that the difference between them has grown steadily. It is the same phenomenon which we noted above in the case of the loans made by the credit societies as compared with savings deposits. In both cases we see large financial resources available for the societies which could not be used by the rural population to an adequate extent. This money which the war brought was again absorbed by the war, more especially in the form of subscriptions to national loans, and to the extent of over 4,000 millions of marks it was assigned to war purposes, as we showed in the article which appeared in our August issue in speaking of the Central Banks. Nevertheless, a considerable portion of this money was applied to the credit require-

TABLE XII. — *Loans to Members*

Federations	1914			1915		
	Total amount	Average per society per member		Total amount	Average per society per member	
Ermland	45,305,835	647,226	3,267	47,166,254	673,804	3,415
Brandenburg	52,731,611	105,463	1,975	53,130,775	105,628	1,978
Pomerania	31,508,770	76,292	1,069	34,248,140	78,551	1,197
Posen I	43,330,416	139,776	1,219	40,908,727	130,699	1,139
" II	14,253,203	72,720	1,013	15,087,110	81,114	1,208
Silesia I	85,169,280	108,912	1,349	85,034,831	106,560	1,325
" II	55,441,619	168,516	1,481	57,027,203	172,810	1,505
Saxony	49,386,555	68,879	1,228	52,402,115	72,279	1,209
Schleswig-Holstein	49,834,714	135,879	2,019	55,167,810	147,114	1,906
Hanover	133,420,342	272,286	2,646	142,991,063	290,632	2,677
Westphalia	240,853,740	442,746	2,570	253,158,184	462,812	2,589
Kurhessen	13,111,867	170,283	1,909	12,827,909	168,788	1,923
Nassau	18,787,326	149,106	1,222	20,350,992	198,992	1,323
Rhenish Prussia I	55,849,220	443,250	3,122	56,137,406	454,355	3,024
" II	95,891,215	173,089	1,676	90,338,307	168,228	1,595
" III	—	—	—	—	—	—
<i>Kingdom of Prussia.</i>	984,875,713	175,839	1,870	1,015,976,826	180,010	1,845
Upper Bavaria	51,218,149	118,015	1,441	51,098,630	117,739	1,480
Lower Bavaria	42,685,191	142,284	1,357	42,355,927	136,193	1,347
Upper Palatinate	33,025,588	122,772	1,362	32,410,243	121,387	1,400
Oberfranken	27,885,299	108,503	1,399	28,209,224	106,050	1,419
Mittelfranken	17,156,558	128,997	1,633	17,657,025	129,831	1,657
Unterfranken	58,388,668	110,592	1,339	58,207,669	111,451	1,364
Schwaben	66,782,005	125,060	1,527	70,811,775	131,620	1,623
Palatinate	35,726,932	133,309	1,395	35,161,183	131,198	1,373
<i>Bavarian Federation (Munich) .</i>	332,868,390	122,243	1,419	335,911,676	122,506	1,451
Kingdom of Saxony	26,871,683	86,683	1,350	27,797,070	86,595	1,344
" of Württemberg	—	—	—	110,948,927	85,609	7,292
Grand-Duchy of Baden I	580,139	48,345	611	622,812	51,902	682
" II	—	—	—	90,175,451	194,915	1,300
" of Hesse	105,940,498	300,115	2,488	103,604,301	296,863	2,506
" of Mecklenburg	2,993,378	80,902	2,259	3,246,247	87,736	2,450
" of Oldenburg	13,841,670	187,050	1,617	15,861,032	208,698	1,460
Alsace-Lorraine	9,577,415	44,340	754	9,143,348	40,637	741
<i>Germany.</i>	1,477,548,886	158,433	1,744	1,713,287,770	153,452	1,571

of the Credit Societies (in marks).

1916			1917			1918		
Total amount	Average		Total amount	Average		Total amount	Average	
	per society	per member		per society	per member		per society	per member
46,372,652	662,466	3,372	45,930,686	697,332	3,517	46,008,195	705,524	3,774
50,119,037	99,839	1,831	48,505,728	120,774	2,131	47,731,990	107,822	1,947
32,377,300	73,921	1,029	30,881,915	102,218	1,271	27,666,125	104,008	1,346
38,350,927	122,527	1,088	36,239,568	164,451	1,382	33,079,548	140,833	1,189
16,371,363	80,252	1,187	15,255,252	77,618	1,127	14,257,890	77,647	1,086
81,846,287	102,437	1,287	75,296,384	123,824	1,487	65,117,051	112,751	1,361
54,612,469	165,492	1,460	46,799,110	183,100	1,558	45,371,485	183,203	1,539
47,312,073	65,439	1,153	45,130,196	86,012	1,368	42,654,668	98,420	1,259
48,442,796	128,156	1,865	47,164,778	139,471	1,991	48,126,194	147,290	1,356
137,649,714	274,750	2,632	140,491,652	291,926	2,663	113,359,039	244,362	2,283
252,644,949	462,720	2,594	254,329,822	471,575	2,649	352,700,446	640,028	3,662
12,838,937	168,933	1,934	12,451,459	195,383	2,130	12,175,404	191,064	2,053
18,590,136	139,775	1,213	18,104,673	171,223	1,363	16,422,083	157,905	1,377
56,245,827	436,014	3,057	52,717,379	457,407	3,064	51,640,146	441,377	2,943
69,362,834	124,753	1,182	75,920,631	146,919	1,363	80,328,830	160,337	1,478
60,176,981	164,594	1,491	56,578,682	193,131	1,977	54,543,219	165,785	1,507
1,023,314,280	168,780	1,768	1,001,797,915	207,476	2,056	1,053,182,313	219,825	2,164
47,467,410	111,951	1,466	46,090,662	126,141	1,471	40,794,559	122,338	1,433
41,803,877	134,418	1,309	39,174,696	154,131	1,422	34,436,662	172,183	1,570
30,134,715	115,010	1,334	27,026,456	137,741	1,462	25,592,220	132,746	1,386
28,183,732	106,354	1,439	27,537,393	128,157	1,569	26,447,734	162,256	1,907
17,264,813	126,947	1,751	16,035,862	137,088	1,743	12,253,588	164,238	2,147
57,547,989	112,839	1,380	54,674,635	140,044	1,629	55,627,295	138,721	1,616
67,938,421	126,751	1,554	63,351,391	136,951	1,620	57,057,277	143,335	1,726
30,757,233	115,196	1,247	26,971,823	129,998	1,156	20,600,434	87,290	906
321,096,190	118,442	1,418	300,862,918	142,179	1,772	272,809,769	143,963	1,596
28,569,897	88,726	1,323	27,006,032	70,561	910	20,897,601	100,735	1,262
103,152,513	79,532	674	98,861,291	78,349	666	96,667,759	78,528	667
557,139	46,428	614	479,214	44,872	608	424,050	42,405	588
82,016,549	176,382	1,192	70,734,721	170,139	1,137	65,295,423	201,529	1,400
105,664,458	307,165	2,805	91,867,618	272,150	2,427	88,783,366	265,025	2,450
3,163,570	79,089	2,338	3,104,820	96,944	2,550	4,048,835	126,526	3,305
16,347,204	217,963	1,843	20,704,920	304,013	2,510	27,056,913	403,745	3,373
8,564,195	37,895	700	7,280,715	40,362	654	—	—	—
1,692,446,195	146,468	1,525	1,622,703,264	169,883	1,716	1,629,160,029	181,405	1,789

ments of other forms of co-operation, to which we shall have occasion to refer in future articles.

Lastly, with reference to the sums owned by the co-operative credit societies and held by them in the form of securities, its importance is quite insignificant as compared with the total assets, especially in the years preceding the war. This is a result of the sound conviction held by these societies that the deposit of superfluous amounts with the Central Co-operative Bank is the most profitable investment to be made of them. The risks attending investment in bonds (decline in value, etc.) may interfere with the normal working of these credit societies and even affect their solvency. The large increase in the holdings in such bonds of recent years is accounted for by subscriptions to war loans made by the co-operative societies. For the last year under consideration, 1918, 7,186 co-operative credit societies, that is to say less than half, for the whole of Germany, replied to the enquiry as to the money they had invested in bonds, and the value of the bonds which this number of societies held amounted to 471,575,038 marks (in 1914 1,319 credit societies owned bonds to the value of 26,595,535 marks).

The total assets for the war years were the following:

TABLE XIII. — *Value of Assets for Years from 1914 to 1918*
(in marks).

Year —	Amount —
1914	1,826,518,027
1915	2,156,871,735
1917	2,460,907,396
1917	2,789,684,970
1918	3,515,167,277

We thus see that in five years' time the assets have almost doubled and have always exceeded the liabilities for the corresponding years.

§ 4. PROFITS AND LOSSES OF THE CO-OPERATIVE CREDIT SOCIETIES.

We will conclude by a reference to the profits and losses of the credit societies and their amount. A comparison between the assets and the liabilities of each year shows the results set forth in Table XIV.

TABLE XIV. — *Profits and Losses for the Years 1914 to 1918 (in marks).*

		Liabilities	Profits	Losses
1914		1,826,512,027	1,826,804,768	—
1915	. .	2,156,871,435	2,146,374,954	10,496,481
1916	. . .	2,460,907,396	2,452,285,729	8,621,667
1917	. . .	2,789,684,970	2,778,353,564	11,331,406
1918	. . .	1,315,167,277	3,500,183,202	14,984,075

The excess of losses over profits in 1911 is explained partly by the heavy losses in Hesse as a result of the failure of the local co-operative bank. In the following year, 1915, the profits attained the large amount of over 19 million marks, which is accounted for more especially by the improved situation of the Hesse co-operative societies. In 1916 the increased losses were due to Württemberg and the Rhenish Prussia III, which are included for the first time in the statistical returns. The profits have declined as compared with 1915. The figures for 1917 and 1918 show a marked improvement on the whole, but the losses are still numerous. In 1918 the losses incurred in 608 cases rise to 1,345,492 marks, but they are offset by profits realised by 10,325 credit societies amounting to 16,329,567 marks. A policy of ever lower rates of interest, capable direction and inspection of business, enable the societies to avoid loss, and thus increases by the amount of net profits the capital owned by the societies and strengthens their reserves to meet all contingencies. This improvement has been slowly taking place in the case of the agricultural credit societies during the war years, and has contributed much to establish them on that sound economic basis which will enable them to carry on their operations successfully.

* * *

This retrospective review of the development of the agricultural credit societies shows that their expansion during the war has not kept pace with the pre-war period, but that on the other hand the societies have been consolidating their position, enlarging their sphere of activity, and extending their operations beyond the field of agriculture so as to embrace the war economy of the country as a whole.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

FRANCE.

THE FIRST AGRICULTURAL CONGRESS ORGANIZED BY THE GENERAL CONFEDERATION OF LABOUR. — *La main-d'œuvre agricole*, Paris, June 1920.

The first agricultural congress organized by the Federation of Agricultural Workers, affiliated to the General Confederation of Labour, was held at Limoges on 4, 5 and 6 April last. Delegates were sent to the conference by more than 150 out of the 202 unions affiliated to the Federation of Agricultural Workers. These 202 organizations are divided thus:

Hérault 31; Landes 23; Nièvre 22; Marne 18; Seine-et-Marne 16; Gard 13; Cher 12; Aude 10; Pyrénées-Orientales 8; Seine-et-Oise 8; Haute-Vienne 6; Aube 6; Gironde 3; Yonne 3; Oise 2; Basses-Pyrénées 2; Nord 2; Dordogne 2; Loiret 1; Jura 1; Aisne 1; Allier 1; Eure-et-Loire 1; Calvados 1; Aveyron 1; Seine 1; Charente 1; Côte-d'Or 1; Algérie (Oran) 1. There are thus 31 departments in which the agricultural trade union movement has obtained a foothold.

The following resolutions were adopted:

A. *The Labour Crisis*. — "The Congress recognizes that the general unrest under which the population of rural workers is suffering is only the consequence of bad organization of work and of the perpetuation of obsolete methods of cultivation, absolutely opposed to modern technical progress and the public needs;

"That the crisis in agricultural labour is only the result of the state of want and poverty in which the workers of the land have been constantly plunged;

"That it is absolutely necessary to take energetic measures to re-establish equilibrium in agricultural production;

"The Congress declares the necessity for the intensification of production by working all lands capable of being cultivated, by the use of improved machinery, and particularly by motor cultivation, as well as by a greater use of chemical manures;

"To diminish the effects of the rural exodus and to keep the worker on the land it is indispensable to give him means of existence equal to those given to workers in industry and trade, and to guarantee him higher wages and shorter working days, and it is also desirable that he should benefit by all the labour laws;

" The Congress declares that the use of foreign and colonial labour must be strictly supervised and controlled ; that the employment of such labour must not be allowed to cause competition on the labour market, such labour being only employed to make up any deficiency in the home supply where such occurs ;

" It also considers that as a means of doing away with the long periods of unemployment to which rural workers are subject, it is absolutely necessary to create and develop small rural industries ;

" It expresses its wish to see a system of labour exchanges in which both employers and workers are represented extended and developed under the control of the unions on the same conditions on which it works for wage earners in industry and trade in those departments where the unions have been able to impose their will ;

" It asks that all private or clandestine employment agencies, which still exist, should be closed ;

" The Congress raises an energetic protest against the use of military labour in agricultural work, which seems to be nothing but a disguised intervention of the army in labour disputes ;

" Finally the Congress cannot insist too strongly on the need for unions of farm workers, woodmen, horticultural workers, vineyard workers, resin-gatherers, hoop-makers, etc., reminding them that it is on their power and their action that the realization of the desired ends depends and it invites them to neglect no means to these ends."

B. — *Social Education.* — The Congress recommends the formation of clubs for studying, libraries, etc., within the workers' unions.

C. — *Accidents during Work.* — Work being necessary for the community and being carried out for its profit, any accident occurring to a worker should be helped by the community.

The Congress accepts the conclusions of a report asking:

1. That the liability shall not fall on the employer alone, but on the community ;
2. That all possible means shall be adopted for the due discharge of the liability ;
3. That compensation for injury shall be complete ;
4. That compensation be paid to all victims of accidents during work ;
5. That special methods shall be employed in treating victims of these accidents ;
6. That an insurance fund be created for the benefit of victims of accidents.

The following motion was adopted :

" The agricultural workers, inasmuch as they are an integral part of the sovereign French people, demand from Parliament the equality which is denied to them by the non-application to them of the labour laws which benefit their comrades in industries and trade ;

" They pledge themselves by constant agitation to demand from their parliamentary representatives the extension to all workers of the laws relating to accidents during work, arbitration, social protection and inspection of work."

D. Chambers of Agriculture. — The object of these not being sufficiently defined, the following resolution was adopted:

" The Congress declares that it will take no part in the Chambers of Agriculture as they are constituted at present."

E. Profit Sharing. — The following resolution was adopted:

" The Congress considering that profit sharing in all its forms is contrary to the aims of trade unionism; that it is a means for the employers to insure their power; that it could only be just when it permits workers' organizations to share in the management of works, mines and farms, which our employers refuse;

" Considering further that profit sharing is a trick to produce enhanced profits without benefiting our comrades;

" The Congress rejects all participation in profits and declares that it desires only to realize trades union aims; the suppression of mastership and the realization of that harmonious society to which we all aspire."

F. Eight Hours Day. — " Considering the danger which there would be to agricultural production in maintaining the present agricultural working hours, which reduce land workers to an inferior social position, so that they find themselves attracted towards industrial occupations because of better regulated work;

" The Congress declares its desire to bring about the eight hours day for agriculture."

G. General Resolution. — Before separating the Congress finished its deliberations by adopting the following general resolution:

" The Agricultural Congress, having enquired into the causes of the agricultural crisis, is of opinion that they are due—

" 1. To the general principles which at present govern economic organization;

" 2. To the inferiority of the social position of agricultural workers.

" The Congress considers that up to the present day all remedies of whatever nature that the present order has tried have only been palliatives, the only result of which has been the consolidation of the individualistic regime;

" The Congress considers that agriculture, like industry, cannot avoid social and technical evolution; that production should not be individual, but entirely social, whence it results that the emancipation of labour follows on the exploitation by the community of all the resources of production. For these reasons the artisan class which has been developed in agri-

culture is one of the greatest obstacles to the increase of production and to the improvement even of the social conditions of the small farmer ;

" The Congress also requests that the work of the Economic Council of Labour (organization for study of the General Confederation of Labour) and the action of the Federation should bear on the following points, applicable both to the mother country and to the colonies and which are calculated to produce an immediate improvement :

" 1. Opposition to any social or economic measure which would tend to preserve artificially the agricultural artisan class ;

" 2. The consolidation of holdings in France ;

" To be efficacious the consolidation should affect a whole commune, or at any rate a sufficiently large piece of land to allow of the adoption of modern methods of cultivation ;

" This cultivation should be organized by means of co-operative societies on trade union lines which should benefit by special advantages :

" 3. The founding of public domains so that all lands lacking direct heirs should return to the community ;

" 4. In the regions devastated by the war domains to be cultivated collectively should be immediately instituted ;

" 5 (a) Bringing the social and economic conditions of agricultural workers of both sexes into harmony with those of other workers ;

" (b) Application of the eight hours day to agriculture in general ;

" (c) Establishment of a minimum wage ;

" (d) Insurance in case of accidents during work for wage earners, small farmers, farmers, owners and metayers by means of a national insurance fund ;

" (e) Campaign against drunkenness ;

" (f) Extension of arbitration, inspection of work and of social hygiene, creation of permanent delegates of agriculture in general, regulation of metayage and letting contracts.

" 6. Establishment of special compulsory agricultural education complementary to primary education ; establishment of technical education, undertaken by specialists, compulsory up to 18 years of age ; possibility for all of a superior technical and practical education."

UNITED STATES.

AGRICULTURAL CO-OPERATION IN MINNESOTA. — HUGHES (H. J.) : \$ 200,000,000 00 for Co-operators. Organised Farmers in the State of Minnesota do an Immense Business, *Northwest Farmstead*, Vol. 21, No. 9 ; Aberdeen (S. D.), 1 May 1920. *Northwestern National Bank Review*, Vol. XII, No. 1 : Minneapolis, April 1920.

In the State of Minnesota, agricultural co-operation is more highly developed than in any other State of the American Union. There are in Minnesota some 3,300 farmers' co-operative organizations, whereas the State of Iowa, which comes second, numbers only about 2,000.

Except in the case of three forms of co-operative society figures do not exist for any year later than 1917. The following table shows the number of each kind of society in that year, or (where the figures are available) in 1918 or 1919.

Kind of organization	Date to which figures relate	Number of organizations
Creameries	1917	643
Elevators	1918	390
Livestock shipping.	1917	400
Cheese factories	1917	52
Stores	1917	102
Potato associations.	1919	75
Fire Insurance	1917	159
Telephone companies	1917	950
Buying clubs	1917	100
Horse breeding associations.	1917	75
Breed associations.	1917	28
Country breeders' associations	1917	25
Bull associations.	1917	8
Cow-testing associations	1917	15
Farmers' lumber yards.	1919	30
Miscellaneous	1917	12

Co-operative elevators. — The co-operative elevators numbered 390 in 1918, an increase of 34 over the preceding year. The total number of elevators and mills in the State was 1,605, so that the co-operative elevators were 24.3 per cent. of the total. In the year ending 31 August 1919, however, the total amount of grain handled by the elevators and mills was 156,667,877 bushels, of which the co-operative elevators handled 64,676,194 bushels, or 39.9 per cent. of the whole amount.

The first co-operative elevator was formed in Minnesota in 1876; one more was added in 1884 and 10 in all are known to have been organized and doing business before 1890. Progress was slow during the next decade, only 20 new elevators having been organized. In 1901 they began to be organized more rapidly and in each subsequent year there has been a substantial increase in the number.

In one county, Clearwater, the grain trade is entirely in the hands of the co-operative elevators; in another, Lincoln, they handle 82.7 per cent. of the grain and in seven others they handle more than 60 per cent.

Most of the co-operative elevators are also supplying their members with agricultural requisites, such as fuel, twine, machinery, flour, feeding stuffs, oil and cement. As a rule this business is confined to a few staple necessities which do not fluctuate greatly in price and are closely associated with grain growing.

The primary object of the co-operative elevators was to obtain for the farmers a better and surer local market, but they are now seeking to obtain a footing in the great grain markets of the country side by side with the existing grain commission firms.

Co-operative dairy societies. — The co-operative creameries are doing a very large business. They manufactured 75,325,732 pounds of butter in 1917 and 83,500,000 pounds in 1918. At the present time two-thirds of the butter produced in the State is being manufactured in co-operative creameries. In 24 counties the co-operative creameries do an aggregate business of more than a million dollars, the largest total being in Ramsey county, where it amounts to \$5,622,000.

Compared with the manufacture of butter, cheese making has made small progress. The latest figures show 83 factories, of which 52 are co-operative. In 1914 about \$750,000 were paid by co-operative cheese factories to their milk suppliers.

There is an important co-operative society, the Twin City Milk Producers, which sells whole milk, handling the output of about 3,000 dairy farms.

Livestock marketing. — At the present time fully 70 per cent. of all the livestock shipped passes through the hands of co-operative shipping associations, of which there are about 450 in the State. The plan adopted by these associations is the simple one of paying the manager a percentage on the consignments rather than a fixed salary. Usually a membership fee is charged, but the amount is very small, as little money is needed for equipment.

It is only in the past eleven years that this form of co-operation has begun to develop rapidly, though there are a few shipping associations which were in existence before that time. Statistics compiled for the year 1914 showed that 82 associations, about three-fifths of all then in existence, did a total business of \$5,750,000. In 1918, it is estimated, 400 associations did a business of \$33,000,000, having shipped 18,000 car-loads of stock.

The saving to the members is thought to be about \$40 per car-load.

Various attempts have been made to carry the co-operative system a step further and to enter into direct relations with the packers. In one instance, a farmers' organization has even undertaken meat-packing itself, but it is too early yet to measure the probability of success.

Potato marketing. — Within the past ten years potato-growing has greatly increased in Minnesota. Co-operative associations for the marketing of potatoes have sprung up and about 20 such associations were reported in 1917. In 1919 a movement was started for the organization of a central selling agency similar to that which had been established in Michigan.

As a result, the Minnesota Potato Exchange was formed in January

last. Up to the present, 33 local farmers' associations have joined the central organization and it is thought that ultimately about 100 will do so.

Farmers' telephones. — Very numerous are the farmers' telephone companies, which have been organized within the last 20 years. They now number nearly 1,000. The rates are low compared with those charged by non-co-operative companies in the cities, being usually not more than \$1 per month.

Farmers' mutual insurance companies. — These have been very successful. In 1916 they did business at a cost of \$ 1.70 per \$ 1,000 of insurance carried, as against \$ 4.60 per \$ 1,000 for the competing stock companies. They paid out for losses, during a five-year period, 71.5 per cent. of their receipts, as against 52.5 per cent. for the stock companies.

In addition to fire insurance companies there are several co-operative hail and cyclone companies which have given satisfactory results.

Federation. — The tendency of co-operation in Minnesota is in the direction of stronger business organizations and the federation of local associations into central bodies which will act as buying or selling agencies for the local associations.

UNION OF SOUTH AFRICA.

AGRICULTURAL CO-OPERATION IN 1919 — Report of the Land and Agricultural Bank of South Africa for the Year ended 31 December 1919. Johannesburg, 1920.

Agricultural co-operative societies in South Africa being largely financed by the Land and Agricultural Bank, the Report of the Bank contains a large amount of information regarding their working. It should be noted, however, that the Bank is only empowered to lend to co-operative societies in which the liability of the members is unlimited, and that a number of societies on a limited liability basis has been formed in recent years, notably in Cape Province and in Natal.

Maize Selling Societies. — All the important maize selling societies in the Transvaal and two of the Free State societies are affiliated to the Central Agency for Co-operative Societies, Ltd., through which all their maize is sold. The remaining maize societies of the Free State have up to the present been working independently, but they have recently established a Central Agency at Bethlehem. The system thus combines localization in collecting the maize at convenient centres with centralization in the sale.

Upon delivery the maize is graded and an advance paid to the member. When the whole crop has been sold (usually by the end of May) the net realized value for each grade is ascertained and the difference between that amount and the sum advanced is paid to the member. The advance is fixed at the beginning of each maize season by representatives of all the maize societies who meet at Johannesburg usually in June of each year.

The Land and Agricultural Bank is also represented at the meeting and the advance is subject to the approval of the Land Bank Board. The Board's policy is to keep the advance as low as possible, but directors of societies prefer to base it on anticipated market values throughout the harvest year. They argue that unless the advance bears some relation to the price offered by outside dealers and speculators at the time of delivery members would be tempted to sell outside their societies. If there were no competition the advance would be based on the cost of production.

The advances for the 1919-20 season were fixed at 12s. a bag for grade No. 2, and 11s. 6d. a bag for grades 3, 4, 5 and 6. The advance of 12s. was subsequently increased in the case of some societies to 15s. a bag. The difference between these advances and the net realized values was expected to be 5s. or 6s. a bag.

It has been alleged that the operations of the maize co-operative societies are largely responsible for the high price of maize. The Report of the Land Bank states that the co-operative organization amongst maize farmers does not aim at forcing up prices. Its object is to give the farmer his fair share of the price paid by the consumer and to provide machinery to reach the consumer who is prepared to pay the highest price, no matter in what part of the world he may be. The operations of the co-operative societies prevent the periodical flooding of the market and the temporary depression of prices immediately after the crop has been reaped and this influence acts beneficially not only on members of societies, but also to a limited degree on the maize producers as a whole. To this extent co-operative societies exercise some form of control, but they do not force up prices for the simple reason that their members' produce is only a fractional part of the crop produced in the Union. Thus the 1919-20 maize crop was estimated to be roughly 8,000,000 bags of which co-operative societies received from their members only 553,100 bags.

Dairy Live Stock Societies. — The main purpose of these societies is to supply members with dairy live stock, a limit of £300 usually being placed on the value of stock supplied to any one member. At the end of 1919 there were seven such societies in the Orange Free State and nine in Natal.

It has been considered desirable to limit the membership of these societies to a small number in order to ensure proper supervision by the members over one another. In some cases the number was limited to seven, the minimum permitted under the co-operative laws, but this occasionally produced the curious result that on the death or resignation of a member it became necessary to dissolve the society. It is, therefore, urged that there should be some margin above the statutory minimum of seven.

Cheesemaking Societies. — Only three societies of this kind have been formed, all of them in the Orange Free State. One of these has been absorbed by a larger co-operative creamery; another, after giving satisfactory results in 1916 and 1917, gave disappointing results in 1918. The third society had not yet completed the erection of buildings and plant.

Statistics of Unlimited Liability Societies. — The number, membership, and approximate capital value of members of unlimited liability societies were as follows :

Province	Number of societies	Membership		Approximate capital value of members £
		at 1 January 1919	at 31 December 1919	
Transvaal	14	8,200	8,179	6,290,000
Orange Free State	15	1,187	1,518	2,814,000
Natal	10	124	103	199,000
Cape	1	17	22	50,000
Total	40	9,528	9,882	9,353,000

The business done in 1917, 1918 and 1919 was as follows :

	1917	1918	1919
	£	£	£
Produce	517,582	698,395	816,621
Farming requisities (including grain bags)	159,276	109,895	164,472
Total	676,858	808,290	981,093

Limited Liability Societies. — The Report of the Land Bank incidentally contains some information on limited liability societies. It appears that whereas in the Transvaal agricultural co-operation has developed almost entirely on unlimited liability principles, in the Orange Free State a great expansion began to take place in 1919 on both unlimited and limited liability lines. Societies with unlimited liability have been established or are in course of establishment in practically every district to sell produce and to supply grain bags and wool packs. An almost equal number of societies with limited liability is being established to carry on the business of a general dealer on a cash basis. Societies of both kinds are affiliated to the central provincial organization, the "Federasie."

In Natal co-operation has grown almost entirely on limited liability lines. There is one central organization, the Co-operative Union, composed not of societies but of individuals, which sells produce and buys farming requisites for its members. In the Cape Province there are many societies with limited liability, but no central provincial organization has been formed.

Throughout the Union the co-operative creameries are almost exclus-

ively societies with limited liability and they have formed a central organization embracing the whole of South Africa.

The tobacco-growers have organized themselves on unlimited liability lines in the Transvaal but have adopted limited liability in the Free State, the Cape and Rhodesia. Their societies are combined in the South African Tobacco Growers' Association, which however is not a trading concern. The wine farmers are also organized in a non-trading association.

Proposals have been made for federating all the existing provincial and South African central organizations. The main purpose of such a federation would be to act as broker in selling produce overseas and in purchasing farm requisites.

Part II: Insurance and Thrift

AUSTRIA.

HAIL INSURANCE DURING THE WAR

by HERMAN KALLBRUNNER, Agricultural Engineer.

SOURCES :

DER ASSEKURANZ-COMPASS. INTERNATIONALES JAHRBUCH FÜR VERSICHERUNGSWESEN.

Published by G. Wischniowsky. Years 23, 24, 25, 26, 27. Vienna, 1915-1920.

REPORTS OF THE VARIOUS HAIL INSURANCE INSTITUTES.

In the Austrian Empire prior to its dissolution hail insurance was undertaken by variously organised institutions. Besides those which were founded as joint-stock companies there were mutual non-profit-making institutions and in Lower Austria there was also a Provincial Institute, which still continues to receive from the administration of the province an annual contribution of 80,000 crowns. These institutions in general show little alteration owing to the war. The state of insurance before the war and in 1917, the last year for which we have annual reports, is almost the same. But this stability is not caused merely by stagnation in the development of these institutions. It was the result rather of two opposite movements. On the one hand the number of insured persons diminished; on the other hand the values insured increased owing to the general rise in values.

The mobilization of a large number of the staffs, the danger and insufficient nourishment have retarded work and largely increased the time taken in getting out statistics and accounts. Since the activities of many of these hail insurance companies covered large tracts of country the dissolution of the Austrian Empire means nothing short of ruin for many of the companies which carried on. As a result of the setting up of the frontiers of the several States which succeeded to it, the postal service in all this territory became very irregular, travelling became almost impossible and money could no longer be sent from one place to another. In addition, then, as is still often the case today, frontiers were not very clearly defined and the reciprocal economic conditions of these States were not clear. It is not only the existence of particular enterprises which

are thus compromised, but the conclusion of business undertaken in 1918 and 1919 is impossible, and years must still pass before many of the institutions will be in a position to furnish exact accounts to which no exception can be taken.

The high prices of agricultural products have not however aroused more interest in hail insurance as one might have expected. On the contrary, the interest has decreased in spite of the fact that the companies have taken much trouble in trying to attract new custom by increasing their propaganda. The cause of this state of affairs is that an insurance undertaken on the old scale of values at fairly low premiums is of no value today given the prices now current, whereas an insurance entered into today the value of which was commensurate with present prices would entail much too high premiums: the person who would pay at these rates would have little perspicacity. Properties situated in regions which experience has shown are frequently visited by disasters from hail are the only ones which have perseveringly remained faithful to the insurance companies. The proprietors count on certainly getting back the high premiums which they have paid. These are, of course unprofitable clients for an insurance company.

We will show now, by means of short tables, the course of the development of Austrian hail-insurance companies during the war.

TABLE I. — "*Wiener Versicherungsgesellschaft.*"

Years	Insured values	Premiums	Reinsurance premiums	Damages paid	Share of reinsurers
1913	37,282,247	1,423,957	488,550	1,066,482	185,647
1914	31,230,615	642,786	1,118,332	581,346	843,032
1915	30,133,930	570,493	1,191,838	439,315	706,752
1916	33,542,866	664,113	1,300,980	862,524	1,617,213
1917	44,293,791	834,437	1,486,152	377,428	576,089

TABLE II — "*Österreichischer Phönix, k. k. privilegierte Versicherungs-gesellschaft*" of Vienna.

Years	Insured values	Premiums	Reinsurance premiums	Damages paid	Share of reinsurers
crowns					
1913	99,334,712	1,104,503	1,368,912	685,523	839,239
1914	87,658,678	1,451,987	852,235	1,292,618	732,062
1915	74,346,550	1,387,806	539,530	855,481	329,712
1916	91,765,603	1,873,270	574,363	2,348,976	692,197
1917	105,488,178	2,300,257	686,681	1,064,417	322,502

TABLE III. — "*Donau, k. k. privilegierte österreichische Versicherungsgesellschaft*" of Vienna.

Years	Insured values	Premiums	Reinsurance premiums	Damages paid	Share of reinsurers
1913	48,758,748	1,188,621	298,455	953,871	197,266
1914	46,106,942	1,124,004	283,992	746,557	198,052
1915	49,245,460	1,321,744	178,568	1,091,121	122,035
1916	56,013,271	1,449,620	209,759	1,764,768	—
1917	60,201,370	1,614,141	244,630	999,012	123,138

TABLE IV. — *The "Meridionale" of Trieste.*

Years	Number of policies	Insured values — crowns	Premiums — crowns	Reinsurance premiums — crowns	Damages paid — crowns	Share of reinsurers — crowns
1913	33,745	177,513,652	5,514,404	624,327	4,177,577	703,313
1914	33,522	183,614,901	5,529,510	591,582	4,346,778	309,407
1915	27,870	189,792,376	5,527,083	682,433	4,304,032	548,282
1916	—	—	—	—	—	—

The war prevented this Society from continuing to carry on business in Austria and the closing of accounts for 1916 could not be finished in time.

TABLE V. — "*Wechselseitige Versicherungsgesellschaft*" of Cracow.

Years	Number of policies	Insured values — crowns	Premiums — crowns	Reinsurance premiums — crowns	Damages paid — crowns	Share of reinsurers — crowns
1913	13,977	101,513,623	1,041,462	10,83,185	826,298	825,663
1914	13,138	—	1,190,353	983,433	799,195	1,058,253
1915	—	23,913,279	278,948	181,345	208,905	36,894
1916	5,782	61,112,542	660,273	444,797	629,997	499,676
1917	5,814	68,977,744	1,364,402	500,866	466,872	355,487

TABLE VI. — "*Landwirtschaftliche gegenseitige Versicherungsgesellschaft*" of Prague.

Years	Number of policies	Insured values — crowns	Premiums — crowns	Reinsurance premiums — crowns	Damages paid — crowns	Share of reinsurers — crowns
1913	10,183	13,713,540	191,757	134,305	141,235	88,237
1914	9,106	12,502,470	184,376	119,071	113,840	73,195
1915	7,457	14,557,710	204,316	159,223	100,370	77,271
1916	6,284	13,133,900	168,891	169,663	167,046	148,166
1917	4,669	11,465,350	177,610	127,274	76,123	58,348

TABLE VII. — "*K. k. privilegierte mährisch-schlesische Versicherungsanstalt*" of Brunn.

Years	Number of policies	Insured values — crowns	Premiums — crowns	Reinsurance premiums — crowns	Damages paid — crowns	Share of reinsurers — crowns
1913	3,074	8,295,653	—	—	—	—
1914	2,822	7,996,153	46,497	139,480	15,858	47,573
1915	—	—	55,431	166,295	12,996	38,990
1916	2,210	7,881,388	47,065	141,196	35,055	35,055
1917	—	—	44,887	134,662	8,310	24,931

TABLE VIII. — "*K. k. privilegierte wechselseitige Brandschaden Versicherungsanstalt*" of Vienna.

Years	Number of policies	Insured values — crowns	Premiums — crowns	Rein- surance pre- miums — crowns	Damages paid — crowns	Share of reinsurers — crowns	Number of local- ities affected by hail •	Number of mem- bers to whom damages were paid
1900	766	1,346,021	—	—	—	—	62	136
1905	1,848	2,619,878	—	—	—	—	111	391
1910	3,503	5,197,532	—	—	—	—	312	1,451
1913	1,787	2,625,416	16,523	49,534	14,903	42,279	116	434
1914	1,545	2,415,220	14,683	44,040	9,630	28,890	99	350
1915	1,268	2,632,369	16,706	49,910	14,078	42,235	123	423
1916	1,427	3,122,794	18,237	54,712	25,297	75,891	147	505
1917	1,057	2,300,227	14,833	44,500	12,176	36,592	93	251

TABLE IX. — "*Wechselseitige Brandschaden Versicherungsanstalt*" of Graz.

Years	Number of policies	Insured values — crowns	Premiums — crowns	Rein- surance premiums — crowns	Damages paid — crowns	Share of reinsurers — crowns
1913	857	1,290,530	7,292	18,719	6,771	15,633
1914	947	1,401,967	9,163	20,408	7,183	15,401
1915	972	1,805,183	10,578	20,731	13,722	23,305
1916	935	1,975,183	12,104	29,581	9,496	18,555
1917	751	1,721,140	11,583	25,127	9,952	19,576

TABLE X. — "*Erste böhmische wechselseitige Versicherungsanstalt*" of Prague.

Years	Number of members	Premiums — crowns	Reinsu- rance premiums — crowns	Damages paid — crowns	Share of rein- surers — crowns
1913	8,662	571,943	587,697	345,510	230,484
1914	7,854	278,831	587,738	175,023	370,969
1915	6,609	374,190	735,704	204,983	355,865
1916	6,838	962,460	753,078	1,164,757	973,990
1917	5,614	695,629	762,070	337,650	257,233

TABLE XI. — "*Slavia*" of Prague.

Years	Insured values	Premiums	Reinsu- rance premiums	Damages paid	Share of rein- surers
1913	15,756,547	189,462	289,048	93,393	133,838
1914	14,502,557	176,617	272,196	112,756	180,961
1915	19,621,107	221,876	389,672	150,734	270,977
1916	17,927,790	206,048	371,245	224,660	400,116
1917	17,169,549	191,962	375,864	88,776	178,067

TABLE XII. — "*Niederösterreichische Landsversicherungsanstalt*" of Vienna.

Years	Number of communes	Number of insurances	Number of policies	Insured values — crowns	Total pre- miums — crowns
1913	1,503	11,818	10,307	15,439,040	175,014
1914	1,512	11,642	10,328	15,804,000	177,844
1915	1,474	11,359	9,914	17,734,500	216,132
1916	1,479	11,967	10,487	22,722,310	442,059
1917	1,383	10,377	9,176	21,101,840	237,931

TABLE XIII. — *Insured Values in crowns.*

Products and cultures	1913	1914	1915	1916	1917
Grass-land, clover and pas- turing	47,570	63,650	48,580	91,960	101,990
Wheat, rye, barley	10,437,849	10,997,811	12,407,520	15,863,880	14,452,590
Pulse, potatoes, maize, tur- nips, cabbages, oats . .	4,485,343	4,348,632	4,513,020	5,866,820	5,604,750
Oleaginous plants, textile plants, seed clover . .	77,590	53,217	52,220	142,890	160,750
Seed beetroots	1,098	220	1,360	90	980
Buckwheat					
Vines	369,260	316,560	691,930	734,720	746,690
Vegetables	16,230	17,190	13,180	15,380	31,290
Fruit crops	4,100	6,720	7,090	6,550	2,800
Compensation paid	188,971	169,085	204,328	254,436	180,612

This institution of Lower Austria, founded in 1899, confines its activities in accordance with its articles of association to 1,600 communes. It works on a basis of very low premiums and has frequently sustained heavy losses. Because of this the year 1916 saw its accounts closed with a deficit of 148,755 crowns. It receives from the provincial administration an annual subvention of 80,000 crowns.

Mention should also be made of insurance as applied to the sugar industry.

TABLE XIV. — *Insurance of Sugar Beets.*

Years	Value of insured beets — crowns	Insurance of carriage of beets — crowns	Insurance against lack of profits — crowns	Num- ber of mem- bers
1913.	317,626,787	3,388,082	7,636,599	222
1914.	261,175,876	3,722,690	8,375,899	221
1915.	195,822,601	4,811,898	7,202,775	221
1916.	297,454,223	4,753,182	15,274,478	222
1917.	245,237,002	4,027,139	15,655,730	221

Part III: Credit

FRANCE.

CREDIT FOR THE CULTIVATION OF DESERTED LANDS.

OFFICIAL SOURCE :

RAPPORT DU MINISTRE DE L'AGRICULTURE SUR L'APPLICATION DE LA LOI DU 4 MAI 1918 RELATIVE À LA MISE EN CULTURE DES TERRES ABANDONNÉES. *Journal Officiel de la République Française*, 20 June 1920

§ I. THE LAW OF 4 MAY 1918.

The law of 4 May 1918 on the cultivation of deserted lands is a law to meet special needs. Promulgated at a time when the agricultural situation of France was particularly difficult owing to the invasion of the departments of the North, where intensive cultivation was practised, and owing to the mobilization of the great majority of land workers, it answered the immediate need to supply the deficit in the production of cereals. To this end it was necessary to assist the cultivation of deserted lands in the non-invaded territories, and to allow farmers of the liberated districts to resume their work. With this object in view the law of 4 May 1918 opened a credit of 100 million francs with the Ministry of Agriculture for the purpose of granting loans, without interest, to farmers and to agricultural groups who were ready to undertake the cultivation of the deserted lands.

A decree of 12 July 1918 charged the departmental agricultural committees to investigate the applications, to grant loans and to see that the money advanced was properly used. Further, this same decree has charged the Office for the Inspection of Agricultural Associations and Credit Institutions to supervise the use of the funds by the committees as well as by the borrowers.

Loans are granted to the departmental committees by the Minister of Agriculture, according to the advice of a distribution committee established by article 1 of the decree in question.

The maximum loan is fixed at 250 francs per hectare of cultivable land, in the case of small parcels of deserted land, and up to 1,000 francs per hectare in the case of whole estates. When the beneficiaries are farmers natives of the liberated districts, the loan is increased to 500 francs per hectare for uncultivated parcels of land and 2,000 francs per hectare for whole estates.

The loans to farmers are granted at first for a period which must not go beyond 31 December of the year in which the agricultural year for which the loans are made comes to an end, but the decree of 12 July 1918 accords to the borrowers facilities for repayment by authorizing the agricultural committees to renew the loans on condition of the repayment on account of one fifth or one tenth of the loan according to whether the farmer belongs to the inland zone or is a native of the devastated districts.

From 4 May 1918 to 11 May 1919 the law was administered directly by the Commissioner for Agriculture. Since 11 May 1919, the Commissioner for Agriculture having retired, the Office for the Inspection of Agricultural Associations, which was entrusted with the supervision, has been given also powers to direct the application of the law.

At the outset it was of the utmost importance to act rapidly, owing to the enormous difficulties which the supply of cereals for the troops in the field and the civil population entailed. By constantly urging on the departmental committees the Commissioner for Agriculture greatly increased, in the shortest possible time, the amount of land under cereals.

The rapidity with which it was necessary to act joined to the lack of experience of new bodies such as the agricultural committees has brought about an interpretation of the law in a very wide sense and loans have been granted for the repayment of which the necessary securities have not always been given.

Up to 11 May 1919 the application of the law has produced the following results :

Number of loans.	1,617
Total amount of loans granted	57,204,586 frs.
Total number of hectares put under cultivation.	101,644

The average area of farms put into cultivation, during this period, was about 62 hectares, and the average amount of the loans granted was 35,300 francs.

After the Commissioner for Agriculture retired, the Office for the Inspection of Agricultural Associations and of Credit Institutions, entrusted thenceforth with the application of the law, immediately initiated an investigation into the transactions of the departmental agricultural committees.

Taking into consideration the facts disclosed and the new needs caused by the termination of the war and the liberation of the invaded districts, the Minister of Agriculture was of opinion that important changes should be made in the way in which the law was administered.

Some improvements were effected by simple instructions given to departmental committees in current correspondence. Thus they were told to take advantage of applications for the renewal of loans to demand of all borrowers substantial security for repayment if such had not been given when the loan was granted. The departmental committees were also instructed to reject applications for loans for the development of lands which had been merely "neglected" and were not lands to which the law was intended to apply.

Finally a ministerial circular of 22 August 1919 defined the conditions on which loans were to be made in applying the law of 4 May 1918.

Loans may only be granted :

- (a) in the liberated districts, to all farmers or co-operative agricultural societies who intend to cultivate lands which have been deserted ;
- (b) in the rest of France, to demobilized farmers and to co-operative agricultural societies who wish again to cultivate lands which have been deserted.

In order to help the greatest possible number of farmers, the committees were recommended to grant large loans only in quite exceptional cases.

Further in many cases instructions were given to the committees that without respect of persons they should grant loans in priority to fathers of large families and to occupiers of medium-sized and small holdings. Borrowers were required to furnish special security for repayment in the shape of warrants, bonds, charges on compensation for war damages, mortgages, etc.

Finally, so as to make sure as far as possible of the need for the suggested agricultural undertakings, borrowers are required to be members of some agricultural association and to furnish references as to their capability as farmers.

So as to assist the revival of agricultural activity in the liberated regions, the Minister of Agriculture decided, in agreement with the prefects, to make important deductions from the credits apportioned to the inland departments so that they may be given to the departments which have suffered invasion, the needs of which are continually increasing.

The results thus obtained between 14 May 1919 and 31 December 1919 are as follows :

Number of loans.	1,046
Total amount of loans granted	27,379,568 frs.
Total number of hectares put under cultivation	27,128

The average area of farms put under cultivation during this period was only 35 hectares, and the average loan granted was 26,100 francs.

From 1 January to 31 May 1920 nearly 10 millions of francs the result of reducing the credits granted to inland departments, have been put at the disposal of the agricultural committees of the liberated districts, which will have received, by the time the law expires, the following total loans :

Aisne	11,500,000 fr.
Ardennes	6,500,000
Marne	2,685,000
Meurthe-et-Moselle	1,050,000
Meuse	2,250,000
Nord	2,055,999
Oise	7,700,000
Pas-de-Calais	2,220,000
Haut-Rhin	50,000
Seine-et-Marne	7,500,000
Somme	3,800,000
Vosges	50,000

Total credits allocated to the invaded departments. 47,360,999

To sum up, up to 31 December 1919, out of 99,190,000 francs credits opened in favour of the committees, these had granted 84,584,154 frs. in loans to 2,663 farmers, for the cultivation of 138,863 hectares. Out of 2,663 borrowers 1,125 were refugees or farmers of the liberated regions to whom 54,890,148 frs. were granted as loans.

Up to 31 May 1920, out of 100 millions of francs credits opened in favour of the committees, these had granted 91,299,354 francs in loans to 3,168 farmers, for the cultivation of 168,132 hectares. Out of 3,168 borrowers, 1,450 were refugees or farmers of the liberated regions, to whom had been granted 60,880,998 frs. as loans.

The repayments which by 31 December 1919 only amounted to 1,802,210 frs., had by 31 May 1920 reached the sum of 4,395,512 francs.

The 100 millions having been placed entirely at the disposal of the departmental agricultural committees and the preparatory work for the present agricultural year (the last to which the law is applicable) being finished, the credits opened by the law of 4 May 1918 are exhausted and the working of this law is finished.

It would be premature to try to discover the financial results of this law, since the repayments are spread over a period of from five to ten years, according to whether the borrowers are inhabitants of the inland zone or natives (or farmers) of the liberated regions.

At the present time few of the loans are considered as bad debts ; proceedings have, however, been taken against a certain number of defaulting debtors. It has not been possible to state definitely the doubtful debts, the future of most of the farms which are again being cultivated depending on the results of the present year which, for the majority of the loans granted, is after all the first year which may enable the borrowers to begin to pay off their loans. All over France is clearly seen a desire on the part of all who have benefited by the loans to discharge their debts to the State. Already at the end of May 1920, 4,395,520 fr. 84 c. had been repaid, and it is hoped that by the end of the year the loans granted according to the law of 4 May 1918 will have entered on a period of regular repayment. The repaid funds will be used for the benefit of agricultural credit, to which they will bring an increase of resources at the very moment when it is called upon to help powerfully in the restoration of agricultural production. .

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

FRANCE.

MORTGAGE COMPANIES AT THE CLOSE OF THE WAR. — Rapport du Conseil Supérieur des Habitations à bon marche au Président de la République Française pour les années 1914-1919. Paris, 1920.

One of the unfortunate effects of the war was to bring to a standstill the operations of mortgage companies (*Sociétés de crédit immobilier*). When war broke out one such company was authorizing 70 new loans per month, another a still larger number. The companies were going to ask for over 40 million francs from the Commission for granting loans during 1914, and loans up to 100 millions a year would rapidly have been reached.

At that time there were 72 mortgage companies. Since then and in spite of the war and all sorts of difficulties, 24 new companies have asked for ministerial sanction ; 11 have obtained it.

One company was dissolved prior to 1 March 1920, and there are at present 82 mortgage companies enjoying the advantages granted to them by the laws relating to small properties.

They are distributed over 77 localities ; Paris has 3, Chartres, Limoges, and Nancy, 2 each.

The credits opened by the mortgage companies, which in 1912 amounted to 4,200,000 francs and had risen in 1913 to 15,513,000 francs, had reached 11,373,000 francs in the first seven months of 1914. In view of the rate at which many of the companies were developing at least 30 millions for the whole year 1914 might have been anticipated.

The loans granted by the Old Age Pensions Fund (*Caisse de retraites pour la vieillesse*) to the mortgage companies were divided thus from 1909 to 1919 :

Loans granted by the Old Age Pensions Fund to Mortgage Companies.

Year	Loans granted during the year		Total up to 31 December of each year	
	Number	Amounts	Number	Amounts
		francs		francs
1909	2	100,000	2	100,000
1910	4	602,500	6	702,500
1911	9	2,017,000	15	2,719,500
1912	16	4,200,000	31	6,919,500
1913	58	15,513,000	89	22,432,500
1914	51	11,373,000	140	33,805,500
1919	7	1,000,000	147	34,805,500

GREAT BRITAIN AND IRELAND.

1. — ADVANCES TO TENANTS OF SMALL HOLDINGS. — Land Settlement (Facilities) Act, 1919. — Regulations, dated 8 December 1919, made by the Treasury under Section 18 of the Land Settlement (Facilities) Act, 1919. — *Journal of the Ministry of Agriculture*, Vol. XXVII, No. 3. London, June 1920.

Under Section 18 of the Land Settlement (Facilities) Act, 1919, a county council is empowered to make or to guarantee loans to tenants of small holdings provided by the council under the Small Holdings and Allotments Act, 1908, for the purchase of live stock, fruit trees, seeds, or fertilizers required for the purposes of the holding. Similar powers are conferred upon the Board (now the Ministry) of Agriculture to make advances to the tenants of small holdings which it has provided. Such loans may however only be made in cases where the facilities for obtaining advances from a society on a co-operative basis are inadequate.

The procedure for making advances was laid down in Regulations issued by the Treasury on 8 December 1919.

Every application to a county council for an advance must state

the purpose or purposes for which it is required and must contain an undertaking to apply the money advanced to the purpose authorized. If the money is used for any other purpose the council may require its repayment forthwith.

The applicant must state the capital in cash or in kind, other than the advance, which is or will be available for farming his holding, and whether any part of such capital is borrowed money.

The sum advanced must not exceed the amount of capital which the applicant is able to provide from other sources, except in special cases where the council is of opinion that a larger amount may safely be advanced and the previous sanction of the Ministry of Agriculture has been obtained. Nor may the advance exceed the sum which the council considers necessary for the purpose stated in the application and in no case may the advance or advances to any one applicant at any time exceed £500.

The period for the repayment of the advance must be determined by the council at the time when the advance is sanctioned and may not be extended subsequently except with the approval of the Ministry of Agriculture. In determining the period the following rules must be observed :

(a) The period must not exceed the period during which in the opinion of the council the applicant may reasonably expect to recoup the expenditure proposed ;

(b) In the case of advances for the purchase of live stock, fruit trees, and implements the period must not exceed three years, but in exceptional cases it may, with the sanction of the Ministry of Agriculture, be extended to the maximum of five years from the date of the advance ; in the case of advances for the purchase of seeds or fertilizers the period must not exceed two years.

Advances will not be made directly by the county council (except with the sanction of the Ministry of Agriculture) but through the applicant's Bank. On approval of an application the council will send instructions to the applicant's Bank to advance him the money as he requires it up to the amount and for the period authorized.

The rate of interest must not exceed 5 per cent. and will be payable quarterly or at such other intervals as the Bank may determine. The council will give the Bank a guarantee for the advance and interest and in any case of default in regard to repayment will pay to the Bank the amount due under their guarantee and take all possible steps to secure repayment from the borrower.

With the necessary modifications, the same regulations apply to advances by the Ministry of Agriculture.

It was recently estimated by the Ministry of Agriculture that, owing to the present high prices of live and dead stock, fertilizers, etc., the amount of capital required to farm an ordinary small holding was not less than £20 per acre ; at the end of 1918 it had been estimated at not less than £12 per acre.

2. — SUGGESTED SCHEME OF AGRICULTURAL CREDIT IN SCOTLAND. — CONACHER (H. M.) and SCOTT (W. R.): *Agricultural Credit and Organisation in France, with Suggestion for a Scottish Scheme of Agricultural Credit*. Edinburgh, 1920.

At the instance of the Scottish Board of Agriculture, Mr. H. M. Conacher and Prof. W. R. Scott made a study of the French system of agricultural credit with a view to drawing from it suggestions for establishing a credit system for the benefit of small holders in Scotland.

In their report Mr. Conacher and Prof. Scott suggest that provision should be made —

(1) For the issue of short-term loans (from three months to five years) —

(a) To co-operative trading societies engaged in the purchase of seeds and agricultural requisites and the sale of eggs and poultry, provision of raw material and implements and sale of products of industries, provision of agricultural machinery for farmers and crofters.

(b) To individual farmers and crofters, mainly for the purchase of stock.

(2) For the issue of long term loans to societies of co-operative production to help them to obtain fixed capital.

(3) To individuals desirous of accumulating capital to enter a holding, such individuals having in the meantime deposited sums in anticipation with the credit institution.

(4) To stock insurance societies.

They do not recommend the creation of a central land bank to deal with this varied business, but while they do not propose to adopt the French plan of local co-operative societies dealing almost exclusively in short-term credit, they think that a number of district credit institutions should be formed resembling the French "Caisses régionales." Ultimately they hope that it may be possible to set up such an institution in every county where crofters and small farmers are numerous. In the meantime it might be possible to form them in districts where there is a number of co-operative trading societies. It is hoped that all such societies would take shares in the county or regional land bank. Until the whole scheme was in working order it would be necessary to make some provision for districts where no land bank existed.

UNITED STATES.

LOANS FOR TILE DRAINAGE IN OHIO. — *The Banker-Farmer*, Vol VII, No. 2 Campaign (III.), January 1920.

Efforts are being made in Cuyahoga County, Ohio, to encourage tile drainage and several banks at Cleveland have agreed to make special loans to farmers for this purpose.

Since drainage should pay the original cost in five years the loans will usually be repayable within that period in annual instalments of 20 per cent. which will become due about 1 December or shortly after each crop season.

In order to avoid spending money for drainage systems which might later prove useless the Ohio State University is offering farmers of the county the services of expert drainage engineers, who will make a complete survey of the farms and advise as to where and how to lay the tile-drains.

Part IV: Agricultural Economy in General

BRAZIL.

INTRODUCTION TO THE STUDY OF THE ECONOMIC PROBLEMS OF BRAZIL (1)

The United States of Brazil, which comprise nearly half the area (8,061,260 square kilometres) and about one-third of the population of South America (19,155,805 inhabitants, including 600,000 natives) (2) were the last of the South American countries to abolish slavery (in 1888), and to become a republic (in 1890).

There are twenty states, a federal district (where the capital is situated) and a territory (Acre). Four-fifths of the inhabitants are white (natives of the country, or immigrants recently arrived), and the rest of mixed race (mulattos and mestizos), negroes (descendants of the slaves) and Indians.

Physically considered, the country is divided as follows: to the north the great basin of the Amazon, covered with "silvas" or forests; in the centre and towards the coast a series of plains interrupted by mountains and intersected by rivers, the largest of which is the San Francisco; to the south west the upper basins of the rivers Paraguay, Paraná and Uruguay, which form the River Plate.

A large part of the country, which was and is still covered with forests, has a most fertile black soil which for a long time showed no sign of exhaustion, even under the most wasteful cultivation.

The *climate* is very varied, owing to the immense extent of the coun-

(1) As we propose to publish articles on the various economic problems of Brazil we begin by giving some general information to serve as a foundation for such articles.

(2) These figures are from the census of 1920 but an estimate made in 1917 gave the population of Brazil at upwards of 17,000,000.

try, but on the whole it is warm, damp, and on the coast unhealthy. There, up to a height of 100 metres, rages the terrible "yellow fever."

Last or nearly last, as regards economic activity, among the countries of South America, it may be said that Brazil began a new era with the abolition of slavery, which was definitely accomplished in 1888. From that time, in fact, it was more fully understood than ever before, that in fertile but thinly-populated countries "to govern means to people," and therefore central and provincial governments and private associations set themselves at great expense to attract immigration from Europe, which from an average of 20,000 in the preceding years rose in 1888 to 131,000, and then varied between 100,000 and 120,000 a year up to the end of 1899. From that time it fell to 35,000, and remained for some years at that modest figure. Then it again increased in consequence of the efforts to attract from every country the needed labour. In 1908 it was 75,000, and in 1910 it rose to 89,000. But in 1915, in consequence of the European war, it again fell to little more than 30,000.

*
* *

The chief economic resource of the country is *coffee*. In fact, of 16 millions of sacks (of 60 kilogrammes each) which is the average amount produced in the world, about 13 millions come from Brazil, whose virgin territories, cleared of woods by fires, the ashes of which enrich the soil, are marvellously adapted to this crop. The principal centres of production are S. Paulo, unquestionably the first, then Rio Janeiro, Minas Geraes, and Bahia.

Coffee alone represents in value three fourths of all the exports. But the excess of production caused a heavy fall in the price, leading to the serious economic crisis which began in Brazil in 1900. To remedy this, certain measures were adopted for keeping up the price of coffee. These were hindrances placed in the way of new cultivation to arrest the continual increase of production, the purchase on a large scale by different States of the excess coffee, its consignment to large European and American firms for storage until a fixed sale price could be decided upon — the government of the State of S. Paulo, which is at the head of this singular state intervention, will meantime pay directly to these firms certain sums on account — and lastly, the imposition of a high export duty to be paid partly in kind, in the form of the most damaged parts of the produce, which are then destroyed.

In the following table we give statistics of the amount of production of coffee in Brazil compared with that of the whole world from 1870 to 1907.

Years	Production of Brazil	World production
	In sacks of 60 kg.	
1871-1871 . . .	3,763,908	7,211,000
1875-1876 . . .	3,406,236	7,599,000
1880-1881	3,659,483	9,829,000
1885-1886	5,586,000	9,565,000
1890-1891	5,547,000	10,366,000
1891-1892	7,596,000	11,811,000
1892-1893 . . .	6,541,000	11,331,000
1893-1894	4,840,000	9,277,000
1894-1895	6,977,000	11,551,000
1895-1896	5,969,000	10,280,000
1896-1897	8,500,000	12,767,000
1897-1898	7,250,000	11,796,000
1898-1899 . . .	9,445,117	13,850,300
1899-1900	9,561,445	13,941,000
1900-1901	11,373,371	15,158,000
1901-1902	16,270,678	19,915,000
1902-1903	12,903,504	16,745,000
1903-1904	11,193,505	17,193,000
1904-1905	10,597,080	15,507,000
1905-1906	11,055,378	16,306,000
1906-1907	20,409,180	

As a complement to the above table we add another showing the exportation of coffee from 1908 to 1918.

Years	Sacks of coffee of 60 kg.	Years	Sacks of coffee of 60 kg.
1908	12,658,457	1914	11,271,000
1909	16,880,696	1915	17,061,000
1910	9,723,738	1916	13,039,000
1911	11,257,802	1917	10,606,000
1912	12,080,303	1918	7,433,000
1913	13,267,449		

* * *

Another colonial product largely cultivated, especially in the maritime states north of Rio Janeiro (Pernambuco) is *sugar cane*, so that raw sugar is an article of exportation. But still more important are *maté* or Paraguayan tea, cultivated almost exclusively in the State of Paraná

(73 millions of kilogrammes were exported in 1918) and *cocoa* which is obtained specially from the State of Bahia and in the basin of the Amazon, and of which Brazil produces the largest quantity in the world. In 1918 about 42,000 tons were exported.

Manioc, *maize*, and *beans* are important articles of food together with dried or salted meat, called "xarque." *Wheat* and *rye* are also cultivated in the southern states in quantities that promise abundance in a short time for all requirements. The *rice* cultivation, favoured in every way by the government, is also very promising. The growing of those kinds of *fruit* which belong to the temperate zones seems destined to have a great future, because the fruit comes to maturity in a season (winter and spring) when the demand is greatest, and the sale in the northern hemisphere most remunerative. Oranges, pine-apples, guavas, bananas should also be mentioned, and lastly, the vine, the cultivation of which promises to become important in the southern states (Rio Grande and Santa Caterina) where it has been spread by the Latin and German colonists.

The following table shows, in milreis, the value of the fruit exported from 1910 to 1917:

1910	6,142,157	1914	10,697,527
1911	6,388,452	1915	7,407,964
1912	8,916,327	1916	10,117,470
1913	5,010,780	1917	9,078,000

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Of textile plants, the chief is *cotton*, more especially cultivated in the States of Pernambuco, Ceará, Parahyba, and Maranhao, an important article of export notwithstanding the progress of the national industry, which absorbs a large part of the crop. (Exportation in 1918 was 2,594 tons).

In the States of Bahia and Rio *tobacco* is largely cultivated and exported chiefly to France and Germany. (In 1918 were exported 29,795 tons).

The chief characteristic of Brazil are the virgin *forests* or "silvas", which in spite of the continued feverish deforestation still cover two-thirds of the whole area. They not only supply to commerce a great quantity of timber for building and cabinet making and dye woods, including the "brazil" or red wood which gives its name to the country, but also many medicinal plants, such as sarsaparilla, which grows in the basin of the Rio Negro, ipecacuanha and cubeb, both from the basin of the Amazon, and above all *rubber*, next after coffee as to quantity exported.

Brazil takes the first place in the world for the production of rubber. It is obtained almost exclusively, by means of incisions, from the tree *Hevea brasiliensis*, which the natives call "borracha," or "seringa," growing wild in the basin of the Amazon. Its produce, the finest known in the world, is known in commerce by the name of *Pará* state, the which is the centre for the greater part of this trade.

Besides from *Hevea*, which is peculiar to the damp tropical regions of the Amazon, rubber has of late been obtained in the dry districts from "manicoba" or "manihot" in Ceará, and from "mangabeira" in the State of S. Paulo.

The world's production of rubber was in 1892 about 30,000 tons, of which more than 61 per cent. was furnished by the Amazon regions. After 1892 the world's production continued regularly to increase, amounting in 1911 to 80,000 tons. But the respective positions of the various producing regions has changed; the rubber of the Asiatic forests has practically disappeared, but a new competitor has arisen: the rubber of the Indo-Malay plantations. The following comparative table, completed by the next as regards the exportation from 1908 to 1918 may give an idea of the development of the production and exportation of rubber:

Production of Rubber.

Years —	Pará wild — tons —	Pará cultivated — tons —
1898-99	21,909	1,285
1901-01	28,161	3,790
1903-04	31,095	19,690
1906-07	38,767	670,000
1910-11	37,623	7,930,000
1911-12	39,581	13,000,000
1912-13	41,950	28,500,000

Exportation of Rubber.

Years —	tons —	Years —	tons —
1908	38,206	1914	33,468
1909	39,026	1915	35,165
1910	38,547	1916	31,495
1911	36,547	1917	33,998
1912	42,286	1918	22,262
1913	36,232		

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Agriculture, carried on in the so-called "fazendas" by "fazendeiros" has generally a wasteful character.

Animal products are few. *Cattle*, for instance, are only raised on a large scale in the States of Matto Grosso, Paraná and Rio Grande do Sul, whence they are driven in herds to the States of the River Plate where the dried meat is prepared to serve as an accompaniment to bread for a large part of the population of Brazil.

For some time past the breeding of *horses* and *mules* has been extending.

In the State of Santa Caterina, *silk-worm* breeding has begun.

The waters of the rivers are rich in *fish*. In the basin of the Amazon are found great numbers of *tortoises*, the eggs of which are made into that greasy condiment called "manteiga."

The mineral products are of much greater importance. The supply of *diamonds*, so rich in the last century as to dim that of India, has diminished, and is now far surpassed by the recent yield of South Africa. Its principal centre is Diamantina in the State of Minas Geraes, which sells diamonds to the value of about 1,200,000 milreis annually, and the diamond district of Bahia reaches almost the same figure.

But even more important is the *gold*, which in the 18th century was so abundant as to furnish from 1714 to 1746 more than 500,000,000 of francs in metal; it then declined in quantity, but rose again sufficiently to form an important annual export. Its chief centre is Ouro Preto in the State of Minas Geraes.

Another important mineral is *iron* of which the chief centre is the mining State of Minas. The government mine of San Giovanni Ipanema in the State of S. Paulo is worthy of note. In Minas Geraes rich veins of *manganese* are being worked. In the State of Bahia *monazite* is found, a kind of sand from which is extracted thorium used in the manufacture of the filaments for incandescent lamps. In other places *mica* is abundant. In the southern states some diminishing veins of *coal* are worked.

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Like all the other countries of Latin America, Brazil has not yet made sufficient progress to devote itself to the *industrial life*. Education, initiative, capital and labour are all wanting. The few industries that have arisen form an exception. These are the extraction of sugar at Pernambuco, and of brandy from the cane called also "rachaca" or "pinga" (the national beverage), the grinding of cereals (Rio Janeiro and S. Paulo), the manufacture of macaroni, etc. (Rio, S. Paulo, Porto Alegre), cheese making (Minas), the preparation of dried meat in the numerous "xarqueados," especially in the State of Matto Grosso, where there is also a famous Belgian factory of liquid extract of meat (Cibil), important cotton manufactories (at Minas, Rio, Pernambuco, S. Paulo, Salto de Ytù, Sotocabo, etc.), the rising manufactures of wool, jute, pottery, glass, bricks, the government steel works of S. Giovanni Ipanema, and the great match factory of Nitcheroy near Rio Janeiro. Nearly all the manufactured goods required are imported. The efforts of the States and of the federal government have for some time been directed to industrial development, and for this reason a policy of protection has been adopted, causing a general and considerable increase in the cost of living. The heavy duties imposed have raised smuggling to an industry practised on a large scale.

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Brazil has devoted much of its energy to the extension of means of *communication*, which, though as yet absolutely disproportionate to the vastness of the country, have nevertheless considerably increased in proportion to the population. Many submarine telegraphs belonging to English and French companies connect the coasts of Brazil with Lisbon, Senegal, the River Plate and the Antilles.

Ordinary *roads* are few but in compensation there are 17,159 miles of railway (at the end of 1917) nine-tenths of which are, however, narrow gauge of only one metre. Both construction and management leave much to be desired; it is enough to know that the great "estrada de ferro do Norte" from Rio Janeiro to S. Paulo, perhaps the principal line of the whole country has in parts a gauge of 1.40 metres and in other parts of only one metre, so that at a certain point both passengers and goods must change trains. Similar and worse inconveniences occur in nearly all the other lines. The English line connecting S. Paulo with Santos crossing the mountains of Serra do Mar is very remarkable, being in great part formed of an imposing system of funiculars. But two-fifths of the railways belong to the State. The construction of a great transcontinental line has been planned, which is to continue the trunk line Pernambuco-Paulo Alfonso now

working, to cross the Brazilian States of Bahia, Goyaz and Matto Grosso, and to terminate on the Pacific, at Callao in Peru.

Nature has endowed Brazil with a marvellous network of *navigable rivers*, without which much of the country would be quite impracticable.

The chief artery is the Amazon, which in 1867 was declared free to the navigation of all nations, and which is regularly ascended by vessels (English, Italian, American) as far as the inland Brazilian port of Manaos, and even further, up to the Peruvian port of Iquitos. Other navigable networks are that of the Rio S. Francisco, and the lagoon of Patos. On the whole, the internal navigation is very active. The *maritime navigation*, including that part which, in the basin of the Amazon, enters and is merged in the fluvial navigation, is still inferior to the great development of the coasts, but is continually increasing. In 1917 it amounted to 14,480,820 tons (incoming) of which three-fifths were foreign vessels, because the Brazilian *mercantile marine* in 1917 had only 459 vessels totalling 395,367 tons of which 377.347 were steamers. The "Companhia Brasileira," the "Novo Lloyd Brasileiro" and the "Companhia intermediaria de los portos do Sul" are the chief steam navigation companies.

The foreign trade of the country is sufficiently active, amounting as it does to about 100 million pounds sterling. In 1918 it was £113,984,858 and the *exports*, amounting to from 300 to 500 millions of milreis more than the imports, consist chiefly of coffee, rubber, skins, maté, cotton, cocoa, tobacco, sugar and gold. The chief *imports* are manufactured articles and coal from Europe and the United States. With this last country Brazil has the largest commercial connection. Next come England, Germany, France and Argentina. The small trade is chiefly in the hands of the Portuguese colonists.

The development of the commercial relations of Brazil with foreign countries may be seen in the following table taken from the "Statesman's Year-Book," in which the pound sterling is calculated at from 11 ½ d. to 16 d. per milreis (paper).

Years	Imports	Exports
1910	£ 56,532,295	£ 75,465,109
1911	52,944,810	66,838,820
1912	63,373,971	74,647,865
1913	67,166,000	64,849,000
1914	35,472,635	46,803,205
1915	30,088,391	53,950,944
1916	40,369,436	56,462,103
1917	44,509,646	63,031,161
1918	52,816,883	61,167,975

The imports are continually burdened with increasing *customs duties*, especially on the manufactured goods, imposed by the federal government, while many States impose on their own account various dues on the export of their own chief natural products, such as coffee.

The current monetary unit is the *milreis* which in 1888 was still at par, that is, 2s. 3d.; it went down in the following years, owing to the issuing of paper money, as low as 5d. Then by means of a number of judicious regulations, the chief of which was the periodical partial burning of the paper money, the value of the milreis continued to rise up to 1s. 4d. a figure which before the European war seemed to be consolidated in consequence of the institution of the "Conversion Bank" so that the gold milreis was worth 2s. 3d.

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From 1820 to 1917 the number of immigrants into Brazil was 3,428,651. Half of these were of Italian origin.

After 1888 Brazil was the country to which the greater part of the permanent Italian emigration was directed, attracted by the free journey offered from the nearest railway station to Genoa and thence to Rio Janeiro, Santos or S. Paulo. The emigrants from Italy, who in 1886 reached Brazil to the number of 11,600, were 40,200 in 1887 and 140,000 in 1888.

But when the free journey was forbidden in 1902 emigration diminished. In 1910 there were 14,000 immigrants, and in 1917 about 6,000. In any case the number of Italians resident in Brazil is calculated at about a million and a half. Of these about 700,000 are in S. Paulo alone, and the others in Rio Grande do Sul, Minas Geraes, Espiritu Santo and Rio Janeiro.

It is to the Italian element, chiefly Venetian, scattered more especially through the State of S. Paulo, that by the acknowledgement of the Brazilians themselves, the success of the coffee is owing. Its cultivation was little understood, and was seriously threatened by the abolition of slavery: "forao los italianos que salvarao a lavoura do café." Undoubtedly not all the immigrants are in good circumstances; many, deceived by employment agencies, generally Italian, drag out a hard and weary life in great "fazende." In consequence of the crisis which ruined many "fazendeiros," bringing to the labourers the loss of the accumulated sums due to them, the Italian government (Royal Decree Prinetti, 1902) prohibited the gratuitous journey to Brazil until that country should guarantee the wages of labourers by special privileges.

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Until, in accordance with an important decision of the Congress of 1891, the United States of Brazil shall provide for the new federal capital, to be situated on the healthful plateau of Goyaz, the capital is still *Rio Janeiro*

which stands on the magnificent bay of the same name, one of the finest in the world. *Rio Janeiro* is the first city of the Union for its population (975,818 in 1913), for its railway and mercantile activity, and for its maritime trade. Next comes S. Paulo (with 450,000 inhabitants) the capital of the very flourishing State of the same name. *Santos*, its port, with ample piers and well provided, takes first rank as exporter of coffee, and is the second city of the Republic. Then come S. *Salvador* or *Bahia* (348,130 inhabitants) exporting especially tobacco and cocoa, *Recife* (Pernambuco, 200,000 inhabitants) important for cotton and sugar and *Belém* (275,000); the port *par excellence* of rubber. These are the capitals respectively of Bahia, Pernambuco and Pará, and are the chief maritime and mercantile centres of northern Brazil. *Manaos*, the centre of much of the trade with Amazonia is also worthy of note. *Porto Alegre* (150,000 inhabitants) is the chief commercial and maritime centre of the southern States, but *Rio Grande do Sul*, still further south, has an important destiny before it when the port now being constructed is finished.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

FRANCE

1. DISTRIBUTION OF PROPERTY AND LAND TENURE IN ALSACE AND LORRAINE. — BUNLE (H.): Notes statistiques sur l'Alsace et la Lorraine, in the *Bulletin de la Statistique générale de la France*, Paris, April 1920.

A farm census was made in Alsace and Lorraine in 1882, in 1895 and in 1907. According to this last, made on 12 June 1907, of 245,000 farms, only 352 (that is, 15 per 10,000) exceeded 100 hectares. The number of holdings of more than 20 hectares was in the proportion of 17 per 1,000. Although the number of farms returned increased from 234,000 in 1882 to 245,000 in 1907, the number of large holdings diminished from 394 to 352. Nearly the whole increase which took place in the interval was the result of the development of holdings less in extent than 2 hectares; their number in fact rose from about 142,600 in 1882 to 152,200 in 1907. The number of medium sized holdings remained on the whole almost stationary, but whereas the number of holdings from 20 to 100 hectares in extent varied, as well as those from 2 to 5 hectares, the true medium-sized holdings, those 5 to 20 hectares in extent, gained ground. In 1882 there were 31,259 of these, in 1895 there were 32,981, and in 1907 there were 34,471.

TABLE I. — *Number of Agricultural Holdings according to Area.*

Census year	Total number of holdings of						Proportion per 10,000 holdings				
	less than 2 hectares	2 to 5 hect.	5 to 20 hect.	20 to 100 hect.	more than 100 hect.	total	less than 2 hect.	2 to 5 hect.	5 to 20 hect.	20 to 100 hect.	more than 100 hect.
1907	152,246	54,049	34,471	3,830	352	244,948	6,216	2,207	1,407	156	14
1895	139,773	54,757	32,981	4,029	407	231,947	6,026	2,361	1,422	174	17
1882	142,581	55,556	31,259	4,076	394	233,866	6,097	2,375	1,337	174	17

The proportional numbers show this fact clearly. Of 10,000 holdings, in 1907 there were 1,407 from 5 to 20 hectares in extent, as compared with 1,337 in 1882, while in 1907 there were 6,216 holdings of less than 2 hectares as compared with 6,097 in 1882. For all the other classes the proportional numbers of 1907 are smaller than those of 1882. Alsace, even more than the Moselle, is a country of medium-sized holdings. The total number of holdings of 2 to 20 hectares was in 1907 about 33 per cent. of the whole number of holdings in Moselle, while it was 35 per cent. in Upper Rhine, and nearly 40 per cent. in Lower Rhine. Holdings of 20 to 100 hectares in extent are on the contrary relatively more numerous in Lorraine than in Alsace.

The conclusions are different if we consider the total area of the categories of estates. In 1907 the total number of holdings of not less than 100 hectares covered more than 7 per cent. of the whole area of agricultural holdings; those from 20 to 100 hectares in extent covered nearly 20 per cent.; those of 5 to 20 hectares about 38.5 per cent.; those from 2 to 5 hectares 22 per cent. and the small holdings of less than 2 hectares were rather less than 13 per cent. of the whole. From 1882 to 1907 the modifications which were made had the effect of increasing considerably the proportion of the area of the medium-sized holdings, of 5 to 20 hectares (38.5 per cent. of the total area of estates in 1907, as compared with 35.1 per cent. as in 1882); for all other categories the opposite is true. Therefore in the twenty five years in question there has been an increase in the total area occupied by the medium-sized holdings.

From this point of view the three departments show great differences. Naturally it is in Moselle that the relative area of holdings of more than 100 hectares is most considerable. It was 12 per cent. in 1907, as compared with 4.4 per cent. in Upper Rhine, and only 2.6 per cent. in Lower Rhine. In the three departments it is the holdings of 5 to 20 hectares which, taken together, cover the largest area. But while they form nearly 49 per cent. in Upper Rhine, they amount only to 40 per cent. in Lower Rhine, and only 33 per cent. in Moselle. The area of holdings of less than 5 hectares

TABLE II. — *Total Area of Agricultural Holdings Classed according to their Area.*

Census year	Area occupied by the holdings of						Proportion per 10,000 of the total area of the area occupied by holdings of				
	less than 2 hect.	2 to 5 hect.	5 to 20 hect.	20 to 100 hect.	more than 100 hect.	total	less than 2 hect.	2 to 5 hect.	5 to 20 hect.	20 to 100 hect.	more than 100 hect.
1907	112,241	193,936	339,193	171,915	64,284	881,569	1,273	2,200	3,848	1,950	729
1895	115,461	189,478	317,938	207,294	69,168	899,342	1,284	2,107	3,535	2,305	769
1882	112,244	191,426	289,112	170,349	61,354	824,485	1,361	2,322	3,507	2,066	744

is relatively greater in Lower Rhine than in Upper Rhine and especially in Moselle.

Thus the average area of all the holdings in 1907 was highest in Moselle (4 hectares), lowest in Lower Rhine (2.4 hectares); in Upper Rhine it still only attains 2.8 hectares, rather less than that which is calculated for the whole territory (3.1 hectares). If we subtract the very small holdings of less than half a hectare, the average extent of the others rises to 4.7 hectares for Alsace and Lorraine, and to 6.3 hectares for Moselle; it is no more than 4.3 hectares in Upper Rhine and 3.4 hectares in Lower Rhine.

Respecting the tenure of land, of 244,948 holdings in the census of 1907, the occupiers were the owners in 84,266 cases; 29,591 holdings were let to tenants, and 6,350 were entirely held on some other form of tenure. All the rest, that is 124,741, were held on more than one form of tenure.

The proportion of holdings of the whole of which the occupier was himself the owner rose from 324 per 1,000 in 1895 to 344 per 1,000 in 1907, and the proportion of holdings the whole of which was hired rose from 79 per 1,000 in 1895 to 12 per 1,000 in 1907. On the other hand in 1907 about 31 per 1,000 of the holdings enumerated were composed of lands which were partly hired, but of which the occupier owned more than half. In 18 per cent. of the holdings the occupier owned less than half of the area. To sum up, in 84 per cent. of the holdings, the occupier owned the whole or part of the land which he cultivated.

The total extent of the land cultivated directly by the owners thus amounted in 1907 to nearly 616,000 hectares, that is, 70 per cent. of the area of the land included in the census; the land let to tenants covered 244,000 hectares; the lands of other classes, about 22,000 hectares; that is respectively 27.6 per cent., and 2.5 per cent. of the whole area.

From 1895 to 1907 the total area of lands cultivated by the owners diminished from 631,000 hectares to about 616,000; the proportion to the total area of cultivated land remained substantially the same (699 per 1,000 in 1907, as compared with 702 per 1000 in 1895). On the other hand, the

lands cultivated by tenants have increased by 6,222 hectares and their proportion has increased from 26.4 per 1,000 in 1895 to 27.6 per 1,000 in 1907.

In Upper Rhine is the largest extent of land directly cultivated by the owners (76.6 per cent.) ; in Lower Rhine the proportion is more than $\frac{3}{4}$, but in Moselle only 63.2 per cent. On the other hand the total area of the land let to tenants is 34.4 per cent. in Moselle, 21.9 per cent. in Lower Rhine and 21.5 per cent. in Upper Rhine. The proportion of land let to tenants is therefore largest and that of land cultivated by the owners smallest in the department in which the average area of farms is highest and which possess the highest number of holdings exceeding 20 hectares (Moselle). On the other hand the area of the lands cultivated by the owners is relatively largest in the department of Upper Rhine, which has the greatest proportional extent of medium-sized holdings of 5 to 20 hectares.

If we examine the various classes of holdings we find that at first the proportion of the lands cultivated directly increases slightly as the area of the holdings increases : from 71 per cent. for holdings of less than 2 hectares, it passes to 79.6 per cent. for the medium-sized holdings of from 5 to 20 hectares. The proportion then decreases rapidly as the size of the holdings increases. It is only 55 per cent. for holdings of from 20 to 100 hectares and 42 per cent. for holdings over 100 hectares. For lands cultivated by tenants, the contrary is true. The percentage is lowest in the case of holdings of from 5 to 20 hectares. There is a rapid increase in the percentage as the area of the holdings increases, and it reaches nearly 57 per cent. for holding over 100 hectares in extent.

From 1895 to 1907 the proportion of land cultivated directly by the owners only increased in the case of very small holdings (less than 2 hectares) and of the very large holdings (100 hectares and upwards) ; the proportion of lands let to tenants has increased in every class except that of holdings of more than 100 hectares, in which case it decreased from 60.6 per cent. to 56.7 per cent.

From this point of view again Alsace is clearly distinguished from Lorraine. In the two departments of Upper and Lower Rhine the proportion of lands cultivated by the owners was greatest in 1907 for holdings of more than 100 hectares (it amounted respectively to 96 and 89 per cent.) ; in Moselle on the contrary it was lowest (26 per cent.) in this same class.

The 245,000 holdings enumerated in the census of 1907 employed a total number of 570,618 persons, of whom 302,589 were women, that is, a proportion of 53 per cent. In Lower Rhine the proportion of persons cultivating their own lands is highest (nearly a quarter) ; it is lowest in Moselle, where it is less than one fifth of the whole. Conversely the relative number of labourers not belonging to the family of the farmer is less in Lower Rhine than in Moselle ; it is highest in Upper Rhine.

Temporary labourers on these farms are in Alsace and Lorraine about one-third of the whole number (32 per cent.) ; in Moselle they form a larger contingent (36 per cent.). The proportion is almost the same in Upper Rhine, but decidedly less in Lower Rhine where it is not quite 27 per cent.

Of 100 persons working on farms there were 53 women in 1907; this proportion decreases to 51 per cent. in Lower Rhine, and 49 per cent in Upper Rhine, rising on the contrary in Moselle to 58 per cent. This is the result of the textile industry and of mines and foundries in certain districts.

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2. THE DEVELOPMENT OF RURAL HOMES — *Journal d'agriculture pratique*, Paris, 17 June 1920.

The second congress of French agriculture organized by the National Confederation of Agricultural Associations, which represents two millions of agriculturists, was held at Tours from 29 to 31 May. On the question of rural homes, it passed three resolutions which may be summarized as follows:

1st Resolution — 1. That a testator should always have the right to bequeath to one sole descendant the whole of the rural real property belonging to one farm without being required to consider whether the value of the legacy exceeds the amount which the law allows him to bequeath to any one heir.

2. That the testator should be able to stipulate that his real property shall pass undivided to all his heirs, or several of them, and that it shall remain undivided except on the demand of one of those who would naturally take an effective part in the cultivation of the land.

2nd Resolution. — 1. That the regional agricultural credit banks should as far as possible carry on their short term transactions by means of deposits which they should seek in the district or from the savings-banks, so that the advances made by the State may be reserved by preference for making medium term loans and still more for long term loans.

2. That they should make the largest possible use of mortgage bonds to order or to bearer, in order that the capital employed in making the loans may be kept liquid.

3. That the legislature should endeavour to make the mortgage companies available for agriculturists by abolishing the limitation of the extent of gardens or fields which may be acquired, by the increase of the maximum value, by extending their scope to all transactions for the purchase, equipment, transformation, preservation and reconstitution of small family holdings.

4. That for these various operations it should be possible to grant loans up to 40,000 francs.

5. That it should also be possible to grant loans without limit as to amount to every employer wishing to build cottages for his workmen or farm servants.

6. That special terms for repayment by instalments should be granted according to the number of children.

3rd resolution. — That the *Crédit foncier* should take the agricultural line which is contemplated by its rules, and to which it was clearly directed by its first managers.

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3. PROFIT-SHARING IN AGRICULTURE. — *Journal d'agriculture pratique* Paris, 17 June 1920.

In our June issue (p. 452) we gave the opinion of the Academy of Agriculture of France on the question as to the best course to be adopted in order to bind labourers more closely to the fortunes of agriculture. The second French Congress of Agriculture has come to similar conclusions, and its resolutions are expressed in the following terms :

" In order to attract workmen to the farm the Congress considers that paid labourers ought to be assured of suitable lodging for themselves and their families, with a small piece of land where they may cultivate vegetables and keep small live-stock, and at the same time it would seem good policy to connect their interests with those of the proprietor of the land. But sharing of profits properly so called, very difficult to arrange in the case of manufactures, meets with still greater obstacles in agriculture, and might even in many cases be the cause of serious harm.

" To interest the labourer in agricultural improvements, the most practical method would seem to be to ensure to him the agricultural wages current in the district, and to give him in addition :

" 1. A premium on production (a premium per quintal of wheat or oats, per hectolitre of wine, per animal raised or fattened) ;

" 2. A premium on economy (premium for diminution of expenses whether with regard to stores or labour, the farmer being under all circumstances the undisputed master of the management of the work).

" Nevertheless, in a country like France, which with great natural variety, has no less a variety of systems of cultivation and methods of turning the land to account, etc., it is impossible to draw up a general formula of profit-sharing among workmen.

" It is, therefore, for the agricultural associations of every region and for every farmer, to ascertain how, under the circumstances and in existing conditions (agricultural, economic and social), the permanence of the labourers may be ensured by the possession of a cottage and a piece of land, and how it may be arranged to give them a share in the results of the cultivation of the farm."

SWEDEN.

AGRICULTURAL, WAGES IN 1918. — Sveriges officiella statistik : Arbetartillgång, arbetstid och arbetslön inom sveriges jordbruk år 1918 (*Swedish Official Statistics : Supply of Labour in relation to Demand, Working Hours and Wages in Swedish Agriculture*) Stockholm, 1920.

The official enquiry into the supply of labour in relation to demand, working hours and wages in Swedish agriculture in 1918 has been made on the same lines as in the preceding year, use being made of similar documents. These documents are detailed inquiry forms filled in by the presidents of the communal assemblies in 2,182 rural communes, that is to say 93.5 % of the rural communes embraced by the enquiry.

The Supply of Agricultural Labour. — The first question on the list was as to the supply of agricultural labour in each rural commune. The answer had to take the form of a general survey, showing whether the agricultural labourers living in the locality or coming there regularly could be considered as a sufficient amount of labour for the whole of the agricultural work to be done, and was to be given in one of the following words : good, sufficient, insufficient. The results show that in 103 of the communes which have answered, that is to say in 4.7 %, the supply of labour was good, in 1,285 or 58.9 % it was sufficient, and in 750, or 34.4 % it was insufficient; 44 communes, or 2 % were not able to give a definite answer. Comparing this with the previous year, the figures show an improvement as regards agricultural labour. This must be principally attributed to the fact that owing to various circumstances the need of labour for industries has diminished, but it is also influenced by the housing difficulty and also by the shortage of household provisions which have become aggravated in towns and industrial centres during the year. The improvement as regards agricultural labour has however been counterbalanced by the competition of the peat industry and of the fuel commission with its wood-cutting operations. In certain parts of the country, especially in the north of Sweden with its forest districts, the lack of agricultural labour has continued to be very noticeable. However, considering everything, the supply of agricultural labour seems to have been about the same as during the years which preceded the war.

Working Hours. — As regards agricultural work, we possess data on three classes of agricultural labourer, viz. agricultural labourers properly so called, that is to say those who work in the fields, in the barns, on the threshing-floors, etc. ; the carters, whose chief work is to drive the draught animals needed in farm work, but who must usually also groom their horses and clean out the stables ; lastly the workers who have charge of the live-stock. We give here information on the working hours of these three groups of workers, on the one hand during summer (by summer is meant the busy agricultural season, that is to say the three months of summer, when usually work begins earliest and leaves off latest), on the other hand

during winter (that is to say the three winter months when the days are shortest and so work begins latest and leaves off earliest).

For agricultural labourers as a whole the gross working hours per day, that is to say the hours of work including off-time, amounted in summer to 12 hours 18 minutes; the off-time amounted to 2 hours 12 minutes, that is to say the net working hours were 10 hours 6 minutes on the average for the whole of the country. During winter the gross working day was of 9 hours 12 minutes; the off-time 1 hour 18 minutes, and the net working day 7 hours 54 minutes. But the time and division of work vary considerably in different parts of the country. There are two special zones: on the one hand the three departments of the south, which form the provinces of Scania and Blekinge; on the other hand the departments situated round Lake Mälaren where the working day is shorter in summer and longer in winter than in the other parts of the country. Inquiries as to working hours during summer have been made for eight years, and as a result one can see a distinct tendency to shorten the working hours especially in those localities where in summer the working hours had been relatively long.

Where carters are expected, as on many farms, to groom their horses before beginning their farm work, a job which takes from half-an-hour to an-hour-and-a-half, their working day is longer by that amount than that of the other farm workers. But the same working hours are often put down for the two groups, either because the time necessary for looking after the horses is not counted in the working hours, or because they begin work a little later than agricultural labourers properly so-called. It follows that the average working day of carters is only slightly longer than that of the first group of labourers.

The working hours for the workers in charge of live-stock is almost the same throughout the year. On the average the gross working hours throughout the country were 13 hours 54 minutes in summer and 13 hours 24 minutes in winter. The working hours are thus very long but during certain hours the work consists only in herding and watching; on the other hand these workers get plenty of time to rest and take their meals. Consequently it is rather difficult to indicate exactly the off-time. It is calculated that they can be taken as 2 hours 45 minutes in summer and 2 hours 48 minutes in winter, giving a net working day of 11 hours, and 10 hours 36 minutes respectively.

Wages. -- Since the object of this enquiry was only to give a general impression of the agricultural labour market of the whole country, account has only been taken of the conditions common to all Swedish agriculture, not noticing the differences obtaining on this point in the different regions. Consequently figures are only given for the wages of a small number of groups of the more important labourers who are found all over the country, or at any rate in the greater part of the country. As, further, the enquiry deals only with general averages and not with individual cases, it has only been thought possible to give the precise rate of wages of the less skilled and less paid of these groups, that is to say of those whose wages are

generally fixed by local custom, and not for the specialized workers or for bailiffs whose wages depend on their personal capacity.

The wages paid to labourers of the different categories above mentioned differ largely in the different districts. But taking the country as a whole wages are as follows :

As regards unmarried farm servants, who form the most important source of labour of small farmers, the remuneration of their work consists of yearly wages in money together with board and lodging. The importance of these various forms of remuneration differ considerably with the regions ; but on the average for the whole country, the wages of a male farm labourer are 689 crowns per year ; the food is valued at 940 crowns, that is 2.50 crowns per day, so that the total remuneration is 1,629 crowns per year. For a female farm hand the corresponding wages are 376 crowns, 755 crowns (2.07 crown per day), a total of 1,131 crowns. Clothing is also given, principally in Norrland, and this represents sometimes a fairly large sum.

For the male labourers, usually married, who under the name of "*statare*" (agricultural labourers paid partly in kind) work on the large estates of the purely agricultural regions, beside their yearly wages of 646 crowns on an average, receive remuneration in kind called *stat*, consisting of milk, corn, potatoes, etc., and are provided with a house for themselves and their families, the total earnings amount on an average to 1,764 crowns per year. In this figure is included the value of the free house room, which usually consists in southern Sweden of two rooms and a kitchen, but in the rest of the country is generally only one room, the rent of which is valued at 150 crowns, to which must be added the value of free fuel, estimated at 126 crowns on an average. These wages are only applicable to ordinary ploughmen ; those workers called "*statare*" who are in charge of live-stock receive higher money wages and sometimes also higher wages in kind, so that their annual earnings amount to 1,851 crowns.

Beside the *statare* there are day labourers with permanent work who are not paid in kind or are only so paid to a very much smaller extent, and whose daily wages vary considerably in the different regions. This daily wage amounts on an average to 5.99 crowns in summer and 4.69 crowns in winter, but it is less by 2.04 crowns and 1.61 crowns respectively if the workman is fed by his employer.

Besides the day labourers who have usually agreed to work for a year, or at least six months, with one employer, there are labourers who work now for one farmer, now for another, according to the needs of the moment. In summer, on an average, the daily wage of these men is 7.14 crowns and 5.62 crowns in winter, food not included. If the employer feeds them, they get on an average 4.75 crowns in summer and 3.63 crowns winter.

Among the workers paid by the day, there is also a number of women employed in the cultivation of beet roots and potatoes, for harvesting hay, wheat, etc. ; they receive on an average 3.58 crowns per day in summer (or about 2.35 crowns with food) if permanently employed on a farm. If they are only extra hands their wages are rather higher in summer, on

an average for the whole country, 4 crowns without food or 2.67 crowns with food. During winter the daily wage diminishes considerably in the case of women day labourers, as is also the case with men in the same category.

If one considers as a whole the increase in wages for the principal groups of agricultural labourers during the last years, one notices that during the years 1913 to 1918 the total earnings of farm servants have increased by between 130 and 140 %, and for farm workers paid partly in kind (*statare*) by 145 %. But this fact is largely due to the increase in value of the payments in kind, for as regards wages in money the increase is by about 90 to 110 % for farm servants and 95 to 100 % for *statare*. For day labourers wages have risen by from 121 to 157 %, and the increase has been higher for winter than for summer and for men than for women. The general rise in the level of wages during the years 1913-1918 is about 120 to 150 %. The rise in wages for the whole of the groups of labourers during the one year 1918 was estimated at about 40 %.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Fifty-eight governments are now adherent to the Institute.

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The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases and, if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance, and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilising for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 ¹ / ₈ d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para, (Serbia)	=	933 ¹ / ₆₄ d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5 ¹ / ₁₆ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933 ¹ / ₆₄ d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt,	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.733 ¹ / ₆₄ d.	at par
1 Franc (100 centimes) (France)	=	933 ¹ / ₆₄ d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs
1 Kilometre	=	1193.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 ⁸³ / ₆₄ d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933 ¹ / ₆₄ d.	at par
1 Lira (100 centesimi) (Italy)	=	933 ¹ / ₆₄ d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 ³ / ₄ d.	at par
1 Mark (100 penni) (Finland)	=	933 ¹ / ₆₄ d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25. ²¹¹ / ₆₄ d.	at par
1 Milreis, gold (Portugal)	=	45. ⁵¹⁹ / ₆₄ d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	933 ¹ / ₆₄ d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	38.1137 ¹ / ₆₄ d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.015 ¹ / ₆₄ d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia;	=	28.1 ¹ / ₂ d.	at par
1 Rupee, (16 annas) (British India)	=	¹ / ₁₀	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	48.1 ¹ / ₃₂ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	28.037 ¹ / ₆₄ d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
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Part I: Co-operation and Association

FRANCE.

THE REORGANIZATION
OF CO-OPERATIVE AGRICULTURAL CREDIT.

OFFICIAL SOURCES:

LOI DU 5 AOÛT 1920 SUR LE CRÉDIT MUTUEL ET LA COOPÉRATION AGRICOLES, ET RAPPORTS DES COMMISSIONS DE L'AGRICULTURE DE LA CHAMBRE DES DÉPUTÉS ET DU SÉNAT RELATIFS À CETTE LOI.

RAPPORT DU MINISTRE DE L'AGRICULTURE SUR LE FONCTIONNEMENT DES CAISSES DE CRÉDIT AGRICOLE MUTUEL DE 1914 À 1919.

The war made it impossible for the French Government to obtain complete and exact information on the condition of mutual agricultural credit banks. The majority of these were disorganized by the mobilization of their staffs, and several were situated in the invaded departments. During 1919, however, the societies regained, little by little, their normal working condition, and they have been able to furnish precise information on their situation and business. We are thus able to describe the effect of the war on these institutions.

§ 1. BUSINESS DONE BY THE REGIONAL, MUTUAL, AGRICULTURAL
CREDIT BANKS UNDER THE PRE-WAR LAWS.

The 97 regional banks (*caisses régionales*) existing on 31 December 1913 had a subscribed capital of 25,070,087 francs, of which 23,220,305 francs were paid up. On 31 December 1918 the subscribed capital amounted to 27,537,179 francs, of which 25,523,187 francs were paid up, and by

31 December 1919 the paid up capital amounted to 23,123,457 francs. The capital paid up by the members had, therefore, increased by over 4 millions from 1913 to 1919.

The total discount business done by the regional banks was :

In 1913.	208,857,078 fr.
In 1914.	166,187,557 »
In 1915.	80,682,797 »
In 1916.	62,798,088 »
In 1917.	58,295,295 »
In 1918.	61,537,912 »
In 1919.	79,198,633 »

The amount of this business suffered a sudden fall in 1914 owing to the outbreak of war ; but that year had seven months of normal business and 1915 was, therefore, the first whole year to feel the effects of the war. The amount of business progressively diminished during 1916 and 1917 and in the latter year it reached its lowest level : 58 millions, which was only rather more than a quarter of the total for 1913. In 1918 there was a slight improvement, and 1919, the first year since the war, shows an improvement of 18 millions on 1918. This gives reason to anticipate a very rapid return to the pre-war figures.

The deposits held by the regional banks amounted to 4,412,240 francs on 31 December 1913, to 13,849,817 francs on 31 December 1918, and to 18,879,313 francs on 31 December 1919. These figures prove the confidence which the farmers have in the institutions for mutual agricultural credit.

The general expenses of all the regional banks amounted to 592,300 francs in 1913, in 1918 to 608,902 francs and to about 900,000 francs in 1919. During the war they remained almost stationary. In 1919 there was an appreciable increase owing to the general rise in salaries and to the fact that the regional banks of the liberated districts included the general expenses of the previous six years in the accounts of the year.

The reserves increased from 8,000,785 frs. at the end of 1913 to 16,791,547 frs. at the end of 1918 and to 20,646,874 frs. at the end of 1919. They have grown more than threefold and nearly equal the paid up capital of the district banks.

We may add that the number of local banks, which amounted to 4,533 in 1913, has remained practically the same ; a few local banks have, however, been dissolved. The number of banks amounted to about 4,500 on 31 December 1919.

Let us now examine the various forms of credit business done by the district banks under the pre-war laws. The business done was very restricted. The aged farmers and the women, who alone were left on the farms, were not inclined to contract new loans during the absence of the head of the family. They were satisfied in most cases to cultivate their farms as best they could with the least possible expenditure. Works

for reclaiming land and the construction of buildings were suspended whilst waiting for more favourable conditions. Purchases of materials and fertilizers were reduced to the indispensable minimum. There was a remarkable decrease in short term loans with which we will first deal.

(a) *Short Term Loans (Law of 31 March 1890).* — In granting short term loans the regional banks have had at their disposal the following resources :

	1913	1918	1919
	fr.	fr.	fr.
Paid up capital.	23,220,305	25,523,187	27,123,457
Reserve capital (at the end of the preceding financial year)	6,212,976	16,791,547	20,646,874
State advances	67,541,782	69,385,091	67,646,223
Total . . .	96,975,063	111,699,825	115,416,554

(b) *Individual Long Term Loans (Law of 19 March 1910).* — On the other hand very few individual long term loans, as regulated by the Law of 19 March 1910, have been granted. Young farmers, to whom these loans are principally granted, were for the most part mobilized. Therefore borrowers could only have been farmers who were beyond military age, or whose physical infirmities caused their discharge from the army. In both these cases the security for the loans, which consists largely in the working capacity of the borrower, would not have been sufficient. Besides this the granting of an individual long term loan involves a strict inquiry, on the part of the mutual agricultural credit society, into the condition of the borrower and of the land to be acquired. Since the credit societies were deprived of the greater part of their staffs, it would have been impossible for them to carry out thoroughly these inquiries. For all these reasons, the regional banks have generally abstained, during the war, from applying the Law of 1910. There were 3,099 loans outstanding at the end of 1913 to the total value of 11,745,611 francs, and 632 loans were made between the end of 1913 and the end of 1918 for a total sum of 2,350,491 francs, i.e. an average of 3,900 frs. per loan. Thus, from the passing of the law until the end of 1918, 3,731 loans were made of the total value of 14,096,102 frs. At the end of 1919 these figures amounted to 3,883 loans of a total value of 15,857,594 francs.

To facilitate this business the regional banks had received from the State, up to 31 December 1919, 19,348,809.65 frs., of which 5,556,915.49 frs., have been repaid. The advances remaining at their disposal amounted to 13,779,794.16 frs., whilst they had been 14,528,488.14 frs., at the end of December 1913 and 13,943,981.44 frs., at the end of December 1918. The amortization of the loans provided for by the law had been carried out with great regularity and exceeded a quarter of the loans granted.

(c) *Collective Long Term Loans (Law of 29 December 1916)*. — If individual loans, for long or short periods, have had their development arrested by the war, collective long term credit, regulated by the Law of 29 December 1906, has suffered still more from the ordeal through which the country has passed. The formation of new societies, as well as the definite constitution of co-operative societies which were being formed before the war, has not been possible owing to the impossibility of getting together a general meeting forming the necessary quorum.

The co-operative societies which were already working and of which the technical staff, the managers or the workmen were mobilized, were often compelled to suspend their production. Some of them had work on hand which they were unable to finish owing to the lack of labour, or the considerable increase in the price of materials and machinery which invalidated the original estimates.

The co-operative movement which had been making great strides before the war, was, like individual agricultural credit, arrested in its progress during five years. It is now regaining its former scope and adding to itself new branches, such as the production and utilization of electricity, for which there is a great future.

The number of co-operative societies which have benefited by the Law of 29 December 1906 is given in the following table :

Year	No. of co-operative societies	No. of members	Paid up capital	Loans granted
			fr.	fr.
1913	382	48,431	7,519,588	13,188,134
1914	55	8,448	2,157,534	2,052,250
1915	15			522,450
1916	2			160,000
1917	11			312,900
1918	7			260,467
1919	7			512,900
Total . . .	479	56,879	9,677,122	17,009,101

Since the law was passed 479 co-operative societies out of 17,009,101 frs. of loans sanctioned had only by 31 December 1919 actually received 16,870,809.23 frs., of which they had repaid 5,900,698.55 frs. ; by 31 December 1919 there was still at their disposal 10,970,110.68 frs. As we see, the co-operative societies have sometimes repaid in advance part of their loans so that at present the total repayments are over one third of the advances made.

§ 2. BUSINESS CONDUCTED BY THE REGIONAL BANKS

UNDER THE LAWS PASSED SINCE THE BEGINNING OF THE WAR.

If, during the war, mutual agricultural credit has been unable to develop according to the fundamental laws which govern it, it has, on the other hand, had its field of action enlarged by the new measures which have adapted it to the necessities which have arisen.

The extension thus given to mutual agricultural credit has taken the form of encouraging the cultivation of waste lands, giving facilities for the acquisition of small properties by discharged soldiers and by civilian victims of the war, and assisting by special measures the rural population of the invaded districts.

The laws voted by Parliament for these purposes which should be noted are those of 6 October 1916, 7 April 1917, 9 April 1918 and 21 June 1918.

The two first are inspired by the Government's desire that no land should be left uncultivated during the war. Both laws sanction the granting of loans to groups of people for the cultivation of lands which individual effort, if left to itself, would not have worked.

The Law of 6 October 1916 authorizes the granting of loans only to communes and only for a period equal to the time that must elapse until the next harvest. The difficulties of carrying out this law prevented its having appreciable practical results; these difficulties were, more especially, the apportioning of profits and losses, the fulfilment of the formalities required by the Ministry of Finance and the delays in the payment of funds to the communes in question by the municipal receivers.

It was decided, so as to do away with these difficulties, that the loans asked for according to the Law of 6 October 1916 should be granted according to the Law of 7 April 1917.

This law is, in some ways, an extension of the Law of 1916. It authorizes advances for cultivating waste lands, not only to the communes, but to departments, co-operative societies and associations for mechanical cultivation. Loans thus granted are for a period of three years at 1 % interest.

This law does not, like that of 29 December 1906, compel co-operators to pay in a capital in cash. Members' shares may be represented by their interest in the lands which they own or farm. This facility has been very much appreciated, especially in the invaded districts where the farmers were usually not in a condition to make a financial effort.

The advances authorized under the Law of 1917 have been, almost exclusively, asked for by the co-operative societies belonging to the liberated districts. The farmers of these districts, whose individual efforts would have been unable to overcome the obstacles of all sorts which they met in trying to put their farms again under cultivation, readily realized all the advantages to be got from the Law of 1917. They have been able,

whilst awaiting the payment of their claims for war damages, not only to raise loans at a very low rate of interest, but to profit by the co-operative purchase of fertilizers, animals and materials which they needed to cultivate their lands by mechanical means. Under these conditions the co-operative societies of the liberated districts have developed rapidly and have helped to re-establish life in the devastated lands. On the other hand no department has asked for assistance from this law and only a very few grants have been made to communes.

In all 56 communes have taken advantage of the Law of 16 October 1916 and have received 405,661 francs in loans so as to cultivate 1,401 hectares. In 1918 repayments or credits withdrawn amounted to 202,479 francs, in 1919 to 36,674.60 frs., or a total of 239,053.60 frs., On 31 December 1919 the advances remaining at the disposal of the communes amounted to only 166,507.40 frs. Since 1919 no loan has been granted under this law. The repayments are equal to two-thirds of the sums advanced.

Under the Law of 7 April 1917, 20 co-operative societies, comprising 602 members, have asked for and been granted loans to a total amount of 2,597,400 francs in 1918 so as to put under cultivation again 9,153 hectares. The repayments and credits withdrawn amounted to 1,530,484.15 frs., the co-operative societies had at their disposal at the end of 1918, 1,066,915.85 frs., Further, 7 communes received, under the same law, total advances of 191,450 frs. so as to put under cultivation 557 hectares. The repayments and credits withdrawn having amounted to 67,000 frs. they had at their disposal 124,450 frs. at the end of 1918. During the following year 19 co-operative societies comprising 627 members cultivating 11,473 hectares, were granted advances of 7,364,000 frs. of which, by the end of 1919, they had only received 5,760,000 frs. By the end of 1919 co-operative societies and communes had received, under the Law of 7 April 1917, loans to the total value of 8,548,850 frs.; the repayments and credits withdrawn having reached the sum of 1,759,484.15 frs., they still had at their disposal 6,789,365.85 frs..

While the laws of which we have been speaking were framed in view of the need of increased agricultural production, the Law of 9 April 1918 shows the solicitude of the Government and Parliament for those people who had suffered most severely through the war. It enacts that its beneficiaries may obtain loans of 10,000 frs. repayable in 25 years at an interest of 1 % for the purpose of purchasing, equipping, or re-arranging small properties. Further, so as to encourage the birth-rate, the Government will pay annually, for each legitimate child born to the borrower after the conclusion of the loan, 50 centimes of the annuity charge payable in respect of each 100 francs borrowed. It also provides victims of the war with the means of procuring their own livelihood through their own exertions, by work suited to their physical capacity.

This law, unfortunately, presents difficulties and entails obligations and formalities which have, to a certain extent, hampered its application. The disabled men complain of the delays in taking out life insurances

and the long time they have to wait before they receive the documents establishing their rights to a life pension. On the other hand the regional banks do not consider the remuneration that they receive, by the 1 % interest, as adequate to the serious liability which they incur. This liability is mainly caused by the fact that the land purchased cannot exceed 10,000 frs. in value, whereas the amount of the loan and the expenses involved may easily exceed that sum. Already steps have been taken, and others are in contemplation, to do away with, or at any rate diminish, these difficulties.

The Law of 28 October 1919 is specially noteworthy. The object of this law is to prevent seriously wounded and seriously ill men from being unable to obtain insurance from the national insurance fund by reason of their infirmities. For this purpose a relation of the disabled man, or a third party, is allowed to insure himself in his stead.

The Law of 9 April 1918 only began to be practically applied in 1919. During 1918 and 1919 advances to the extent of 4,480,000 frs. have been granted to 39 regional banks, of which advances 2,745,000 frs. had been paid by 31 December 1919. By this date 147 loans had been granted amounting to 1,201,084 frs. The repayments are beginning to come in only now.

The last interesting law dealing with agricultural credit, which is already working, is that of 21 June 1919 for granting special credit facilities to farmers belonging to the invaded districts. This law provides special privileges for groups of farmers belonging to the invaded districts, by easing on their behalf the provisions of the laws governing mutual agricultural credit and by extending the benefits of previous legislation to associations and workers who would have been unable up to now to profit by them. Thus, they allow the allocation to the regional banks of the liberated districts of short and long term loans based on the guarantees which they offer and on the needs which they declare. Further they increase to five or six times the capital the long term loans which can be granted to co-operative societies for production and which, by the Law of 29 December 1906, might not exceed double the amount of said capital. This capital may also be paid in kind instead of in cash. The Law also extends the advantages of collective long term credit to co-operative societies for purchase and supply to voluntary trade associations for carrying out drainage works and agricultural improvements, and under certain circumstances to authorized trade unions. The Law of 21 June 1919 fixes the limit of 20,000 frs. and 25 years as the totals and maximum duration of individual long term loans which, according to the Law of 19 March 1919, could not exceed respectively 8,000 frs. and 15 years, and which the Law of 9 April 1918 limited to 10,000 francs. Finally the Law extends the advantages of agricultural credit to small rural artisans whose work is closely related to agriculture.

§ 3. MEDIUM TERM LOANS.

The different forms of agricultural credit which were in use under old and recent laws have been completed by a new form of credit, known as medium term credit.

This credit is the result of the experience of a certain number of regional banks which, on their own initiative, had practised it so as to allow farmers to undertake business which could not come within the limits of short term credit.

The usefulness of this new form of credit was recognized by the Congress of Agricultural Syndicates and of Agricultural Co-operative and Mutual Societies and so as to regulate its use and to call attention to it, a circular was sent to all the regional banks on 7 October 1916, laying down the conditions under which medium term loans might be granted and fixing their maximum amount and duration at 3,000 frs. and 5 years. This maximum having been subsequently found to be insufficient it was increased to 5,000 francs.

Medium term loans being mostly intended for the purchase of live stock and agricultural requisites, the 5,000 frs. limit no longer corresponded to the very high price of cattle and farm implements. More recently, therefore, all limits on the amount of the loans have been done away with, the regional banks having the power to grant loans proportionate to the requirements of the borrower and the guarantees he can offer. The period of the loan has been extended to 10 years.

§ 4. THE ADMINISTRATIVE ORGANIZATION FOR GRANTING LOANS.

The present position of mutual agricultural credit, as shown by the preceding statistics, proves the vitality of an institution which, after existing for only 20 years, has been able to undergo without being weakened the long ordeal through which the country has passed and during which nearly all farmers between 18 and 50 years have been absent from their farms. In order that these loans may be of the greatest use it is necessary that they should be granted with as little delay and as few formalities as possible. With the present administrative organization the inquiry into requests for loans presented by mutual agricultural credit societies and by co-operative societies, as well as the granting and payment of advances, undergo a procedure, which, whilst it safeguards the Treasury, often involves endless delays.

The central organization for agricultural credit is formed by an administrative service which is part of the Ministry of Agriculture and which is, consequently, hampered in its working by strict rules.

In order that a regional mutual agricultural credit bank can receive an advance, its request, accompanied by the file relating to it, must be sent to the central office. This office, after having if necessary completed the file, sends it to the Office for the Inspection of Agricultural Associations and Credit Institutions. The Inspector in whose district the bank

is situated, examines the request and draws up a report which he submits for consideration to the Council of Inspection. The file, to which is added the report, is then sent to the central office which lays the request before the next meeting of the Commission for Granting State Loans. So as to gain time a Sub-commission has been formed within the Commission so that it may be able to meet more often than the Chief Commission.

The Sub-commission, which meets whenever a sufficient number of applications is ready to be laid before it, deliberates on the applications and gives its opinion on them. This opinion is communicated to the Minister, who decides the question. A draft order must then be submitted for signature, after being endorsed by the Controller of Expenditure. When the order is signed, the loan is definitely sanctioned. This loan then becomes the object of necessary orders and mandates which can only be made by the Accountancy Department of the Ministry of Agriculture. All orders for payment are classified by departments and by kind, and before being signed by the Minister they must again be endorsed by the Controller of Expenditure. The prefects, who emit the orders in the second degree, are informed of the drafts which they must issue, and at the same time a copy of these orders is sent to the Ministry of Finance, which notifies the Treasurers General.

Thus it takes from one to two months, sometimes more, before the regional banks can receive the funds intended for them.

When dealing with a co-operative society these formalities are still more numerous; the original request file must be submitted to technical and economic inquiries by agricultural engineers and by departmental directors of agricultural services.

The mutual agricultural credit banks, which often have to wait several months before receiving funds needed so urgently, have made complaints which grow every day more numerous and pressing against these delays. These just complaints, as also the frequent criticisms recently directed against the organization of agricultural credit, have been the subject of close study. It is owing to this study that the Law of 5 August 1920 was passed; this law codifies and supersedes in part all the laws which since 5 August 1894 have dealt with agricultural credit, and gives the management of this to a public body possessed of financial autonomy and having at its head responsible managers.

§ 5. THE REORGANIZATION OF AGRICULTURAL, MUTUAL, CREDIT BANKS.

According to the new law local agricultural credit banks form the basis of mutual agricultural credit.

The one object of these banks is to facilitate and guarantee business dealing with agricultural production undertaken by their individual or collective members. These banks can be formed, on payment of one-quarter of the share capital, by all or some of the members of one or more vocational agricultural syndicates, mutual agricultural insurance societies, agricultural co-operative societies, trade unions and associations for promoting agricultural interests.

They can grant :

1. To all their members short term loans, the total duration of which must not exceed that of the business for which the loan was made :

2. To all their members medium term loans for equipping or reconstituting their farms. The loans are repayable in ten years by annual instalments, and are protected by special guarantees, such as bonds, warrants, mortgages, or the deposit of title deeds, etc. ;

3. To their individual members long term loans guaranteed by mortgage or a life insurance policy.

For the making of short term loans the local banks discount bills signed by their members on account of purely agricultural business. They can undertake, in respect of such business, payments and receipts to be made on behalf of these same members.

Individual long term loans may amount to 40,000 francs, not counting the expenses. They can be made for 25 years, provided that the age of the borrower at the date of the last instalment is not above 60 years. They bear interest at the rate of 2 % and are intended to facilitate the purchase, equipment, transformation and reconstruction of small rural farms. When the borrower is a military pensioner, or a civilian victim of the war, the loan, which may in such case also be granted by a mortgage company, bears interest at only 1 %, and a bonus of 50 centimes per 100 francs is paid yearly by the State, to decrease the annual payments to the lending society by the borrower, in respect of each legitimate child born to him after the loan is made.

Long term advances can be granted to co-operative societies, trades unions and associations for promoting agricultural interests authorized to carry on business with mutual credit societies. These societies are .

1. Co-operative agricultural societies intended to effect or assist the production, transformation, conservation or sale of agricultural products produced solely by the farms of the members ;

2. Co-operative societies for buying and provisioning ;

3. Vocational associations of a purely agricultural nature ;

4. Agricultural societies whose object is the manufacture of all requisites, products or implements used in agriculture or in carrying out agricultural works of use to the community, or who provide a district or a rural group with up-to-date plant of use to the community, such as slaughter houses, cold-storage plant, electric plant, railway lines, etc., sanitation works, especially building sanitary houses for rural workers, or the improvement of farm buildings condemned as insanitary.

Advances to these societies bear interest at 2 % for a maximum duration of 26 years ; this period can, however, be increased to 50 years for reafforestation co-operative societies.

Regional banks with the following objects count as organizations of the second order :

1. For facilitating the making of short, medium and long term loans

to members of local mutual agricultural credit banks of their districts guaranteed by these societies ;

2. For the transmission to co-operative agricultural societies, to vocational associations or to any other groups special advances which the State may make to them.

They can only accept for affiliation local banks which are situated in their districts and which are not already attached to some other regional banks.

They re-discount, after endorsement by the local banks which are affiliated to them, bills drawn by the members of these banks. They can undertake all payments and recoveries to be made on behalf of the said local banks. They can grant to those affiliated to them advances necessary for the formation of a working capital, with this reservation, that, for banks which have asked for financial help from the State, this advance can not exceed for each local bank, the amount of capital paid to the regional bank as their share subscription. Finally they can issue drafts which fall due at different periods, with or without interest, these drafts can only be drawn in favour of farmers who live in the district of the regional bank.

Certain business can be undertaken either by the regional banks or local banks : either can contract loans for the formation or increase of their working capital ; they can procure capital by rediscounting their bills or by borrowing on their securities ; finally they can receive from any one deposits on current account, either bearing interest or not, and can accept the deposit of securities. The regulations of banks not benefiting by advances from the State fix the maximum sum to be accepted on current account ; those banks which have had financial assistance from the State fix the maximum of deposits on current account or on deposit account ; the total of these deposits must always be represented by assets of equal value which can be realized immediately when the payments fall due.

We may add that the regulations define the extent and conditions of the liability of each of the members as regards the engagements entered into by the banks. In principle members can only be freed from their obligations after the liquidation of any business which was on hand when they retired. In any case their responsibility ceases five years after the date on which they retire.

§ 6. THE NATIONAL OFFICE OF AGRICULTURAL CREDIT.

The most important reform brought about by the Law of 5 August 1920 is the foundation of the National Office of Agricultural Credit, which does away with the administrative delays of which we have spoken.

Henceforth, funds intended for mutual agricultural credit will be administered by an Office, which forms a public establishment having financial autonomy and directed by responsible managers. It can receive deposits from regional banks and agricultural associations, notably those

of Alsace-Lorraine ; it can issue drafts through the regional banks and for the administration of credits voted under the Law of 4 May 1918 on the Cultivation of Deserted Lands (1).

The National Office of Agricultural Credit is organized and works on the lines of a big financial establishment. It adopts bankers' methods for the payment and repayment of advances, such as current accounts and cheques. It is able to apportion the State advances to the urgent needs of the regional banks. It will be in some ways a real clearing house between the various regional banks, being able to take into account the importance of the requirements of each agricultural credit banks according to the time of year and nature of the cultivation of the districts which each bank serves.

Short and medium term loans will be granted in the form of current accounts opened by the Office with the Treasury, the government Deposit Bank (*Caisse des dépôts et consignations*) and the Bank of France ; this will enable the regional banks to receive the necessary advances in a few days and to reduce note circulation to a minimum, loans only being made as the need for them arises.

As regards long term loans, the regional banks will receive in cash the money to be paid to their members ; these sums will be granted to them only according to the number and importance of the applications which are actually granted.

7. THE ENDOWMENT OF AGRICULTURAL CREDIT.

Beyond the credits which may be granted to it by legislative measures, the gifts, legacies, etc. which it may receive, the National Office of Agricultural Credit will acquire the funds which it needs from the following sources :

1. From the repayments made, or to be made, on the hundred million francs credit granted to the Departmental Agricultural Committees by the Law of 4 May 1918 on the Cultivation of Deserted Lands ;

2. By the endowment for agricultural credit agreed upon at the time when the privilege of the Bank of France was renewed in 1897.

By the Law of 17 November 1897 the Bank of France had to pay to the State, for agricultural credit, an advance of 40 million francs, free from interest, and an annual sum equal to one eighth of the rate of discount multiplied by the sum of productive circulation.

When the rate of discount is at 3.50 % the proportion to be put to the payment is raised to one seventh of the discount rate, and when it is above 4 % the proportion has been fixed at one eighth (agreements of 1911).

An agreement of 26 October 1917 prorogues the previous advance of 40 million francs and issues new rules for the calculation of the annual payment.

(1) See our issue of September 1920, page 612.

By 31 December 1917 the sums paid to the State by the Bank of France, earmarked for agricultural credit were as follows :

	Frs	Frs.
Advance		40,000,000.00
Yearly payments :		
1897	2,742,314.80	
1898	3 242,899.26	
1899	4,857,289.95	
1900	5,655,333.72	
1901	4,107,620.15	
1902	3,777,141.87	
1903	4,314,649.43	
1904	4,521,589.76	
1905	4,225,042 51	
1906	5,332,528.05	
1907	7,357,141.60	
1908	5,533,501.80	
1909	4,790,508.64	
1910	5,733,358.28	
1911	7,225,800.55	
1912	8,722,917.85	
1913	13,625,484.92	
1914	14,351,593.89	
1915	10,125,137.90	
1916	23,663,217.73	
1917	36,249,851.74	180,154,924.40
		220,154,924.40

This sum of 220,154,924.40 fr., will increase by at least 40 millions by the annual payments of 1918 and 1919. With the 100 millions repayable under the Law of 4 May 1918 on the Cultivation of Deserted Lands, we get a total of over 360 million francs at the disposal of mutual agricultural credit.

Let us add that, since the beginning of the working of agricultural credit, the total loans granted to the interested parties by the State, under laws other than that of 4 May 1918 dealing with the cultivation of deserted lands, amounts to 124,143,597.88 frs.

On these the following repayments have been made:

Up to 31 December 1913	6,477,966.37 frs.
Between 1914 and 1919	9,744,695.95 »
In 1919	5,823,834.47 »

Total repayments up to 31 December

1919	22,046,596.79 frs.
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At the same date the total advances which the district banks and the communes still had at their disposal amounted to 102,097,001.09 frs.. It is interesting to note that on this sum of 22 millions, the repayments received during the last six years, of which four and a half were war years, have reached a sum of 15.5 millions, which brings the total of the repayments to over three times what it was in 1913.

GERMANY.

AGRICULTURAL CO-OPERATIVE SOCIETIES FOR PURCHASE AND SALE DURING THE WAR.

SOURCES:

JARBUCHER DES REICHESVERBANDS DER DEUTSCHEN LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN FÜR 1914, 1915, 1916, 1917 AND 1918. Jahrgänge 21, 22, 23, 24, und 25. Berlin, 1915, 1916 1917, 1918 and 1919

As a result of the War, the work of several kinds of agricultural co-operative societies has developed considerably in comparison with that of other kinds. We shall find a notable instance of this in studying the co-operative societies for purchase and sale in Germany.

§ 1. DEVELOPMENT DURING THE WAR OF CO-OPERATIVE SOCIETIES FOR PURCHASE AND SALE.

The development of co-operative societies for purchase and sale during the war was similar to that of the agricultural credit banks. They, too, increased their business turnover rather than their number. The number of societies organized and dissolved, during the period 1914 to 1918, was as follows:

Year	Organized	Dissolved
1913-14	275	39
1914-15	57	25
1915-16	87	17
1916-17	85	7
1917-18	142	6

The data for the first year of war 1914-1915 include 24 societies organized and 11 dissolved during the last two months of peace, June and July 1914. The following table show the comparison between the net increase in the pre-war period and during the war years :

Year —	Net increase —
1910-11	66
1911-12	71
1912-13	146
1913-14	236
1914-15	32
1915-16	70
1916-17	78
1917-18	136

A rapid decline is noticeable during the first year of the war, from 236 in 1913 to 32 in 1914 but a notable recovery occurred in the following years, so that in the last year of war the increase (136) is nearly equal to that of 1912-13 (146). The total numerical increase from 1 August 1914 to 1 June 1918 was 361.

The number of co-operative societies for purchase and sale as compared with that of the agricultural co-operative societies as a whole for the years 1910 to 1918 was as follows :

Year —	Total number of agricultural co-operative societies —	Number of co-operative societies for purchase and sale —
1910	23,845	2,280
1911	24,724	2,346
1912	26,026	2,417
1913	27,192	2,564
1914	28,318	2,809
1915	28,555	2,842
1916	28,752	2 912
1917	29,082	2,990
1918	29,609	3,126

Thus the co-operative societies for purchase and sale represent about one ninth of all German agricultural co-operative societies.

Table I shows the distribution of the co-operative societies for purchase and sale amongst the territories of the various States and provinces during the years of the war :

TABLE I. — *Territorial Distribution of Co-operative Societies for Purchase and Sale during the Years of the War.*

States and provinces	1914	1915	1916	1917	1918
East Prussia	27	30	31	34	34
West Prussia	18	18	18	17	18
Brandenburg	18	18	18	21	23
Pomerania	30	29	30	32	32
Posnanian	108	107	105	106	111
Silesia	60	57	57	57	58
Saxony	44	42	40	40	42
Schleswig-Holstein	116	119	129	135	160
Hanover	234	239	275	292	306
Westphalia	256	255	256	263	282
Hesse-Nassau	96	101	109	121	137
Rhine Province	220	118	225	234	245
Hohenzollern	3	3	3	3	4
Kingdom of Prussia	1,230	1,236	1,296	1,355	1,452
Bavaria on right bank of Rhine	55	55	53	55	55
Bavaria on left bank of Rhine (Palatinate)	198	199	201	201	201
Kingdom of Bavaria	253	254	254	256	256
Saxony	84	85	85	87	80
Württemberg	23	26	27	27	30
Baden	850	876	879	883	892
Hesse	213	211	214	222	241
Mecklenburg-Schwerin	5	4	4	4	4
Mecklenburg-Strelitz	1	1	1	1	1
Saxe-Weimar-Eisenach	2	2	2	2	2
Oldenburg	103	101	102	104	108
Brunswick	—	—	1	1	2
Saxe-Meiningen	6	6	6	6	6
Saxe-Altenburg	—	—	—	—	—
Saxe-Coburg-Gotha	14	14	15	15	15
Anhalt	2	2	2	2	2
Schwarzburg-Sondershausen	1	1	1	1	1
Schwarzburg-Rudolstadt	5	6	6	6	6
Waldeck	6	6	6	7	7
Reuss (Elder Branch)	—	—	—	—	—
Reuss (Younger Branch)	1	1	1	1	1
Schaumburg-Lippe	1	1	1	1	1
Lippe	3	3	3	3	3
Lübeck	—	—	—	—	—
Bremen	—	—	—	—	—
Hamburg	2	2	2	2	2
Alsace-Lorraine	4	4	4	4	4
Germany	2,809	2,842	2,912	2,990	3,126
German Colonies (1)	5	5	5	5	5

(1) Windhuk Co-operative Society for Purchase and Sale, Co-operative Society for the sale of Agricultural Products in Caribib, Co-operative Society for Purchase in Caribib, Co-operative Society for Purchase and Sale in Omaruru, Agricultural and Economic Union of Gibeon in German South-West Africa.

The extremely unequal distribution over the different territories of the German Confederation of co-operative societies for purchase and sale is especially noticeable in Table I. Baden, with 850 of these societies before the war, and 892 in 1918, possesses alone almost one third of the total number of co-operative societies for purchase and sale. Next, a long way behind, comes Westphalia, with respectively 256 and 282 societies. Next come Hanover, the Rhine Province, Hesse and the Palatinate with over 200 each. Posenania, Schleswig-Holstein and Oldenburg have over 100 each. In 11 states and provinces the numbers vary from 14 (in Saxe Coburg-Gotha) to 96 (in Hesse-Nassau); in 14 there are less than 10 societies in each; five states have absolutely no co-operative societies for purchase and sale.

Where there were few of these societies hardly any increase occurred during the war. The greatest increase took place in Hanover, where the number rose from 234 societies in 1914 to 306 in 1918. Schleswig-Holstein and Baden increased respectively by 36 and 42 societies.

As regards the form of liability, the societies were divided, during the years of the war, as shown in Table II :

TABLE II. — *Nature of the Liability of Co-operative Societies for Purchase and Sale.*

Year	Unlimited liability		Limited liability		Liability to make unlimited supplementary payments	
	Number	%	Number	%	Number	%
1914	1,329	47.3	1,477	52.6	3	0.1
1915	1,319	46.4	1,520	53.5	3	0.1
1916	1,354	46.5	1,555	53.4	3	0.1
1917	1,370	45.8	1,617	54.1	3	0.1
1918	1,408	45.1	1,715	54.8	3	0.1

In Table II we see that the limited liability societies, both before and during the war, were more numerous than those with unlimited liability.

The societies with the power of calling for unlimited supplementary payments are but an insignificant number, as is the case also with other co-operative agricultural societies.

The further data that we give in this article do not refer, as is the case with the above, to all the co-operative societies for purchase and sale, but only to those which are affiliated to the National Federation of German Agricultural Co-operative Societies (*Reichsverband der deutschen landwirtschaftlichen Genossenschaften*), and which have communicated reports on their work to the Federation. Table III shows the number of these as compared with the total number of co-operative societies for purchase and sale.

TABLE III. *Number of Co-operative Societies for Purchase and Sale affiliated to the National Federation which have sent in Reports.*

Year	Number of co-operative societies for purchase and sale	Number of co-operative societies affiliated to the Federation	Co-operative societies which sent in reports	
			Number	% of societies affiliated to the Federation
1914	2,809	2,228	2,168	97.3
1915	2,842	2,247	2,194	99.7
1916	2,912	2,225	2,219	97.6
1917	2,990	2,295	2,255	98.3
1918	3,126	2,373	2,213	93.3

The decline in the percentage in 1918 (5 %) as compared with the previous year, is chiefly attributable to the increased number of accountants mobilized. The statistics of the National Federation comprise two thirds of all the co-operative societies for purchase and sale in Germany; thus the conclusions drawn hold good, on broad lines, for all co-operative societies for purchase and sale.

The first of these institutions was founded in 1868, in the Grand-Duchy of Hesse, where in the following decade they had become quite numerous. Of the societies which have sent in reports, 12.69 % already existed in 1888, whilst 87.31 % were formed after the Law on Co-operation was passed in 1889; of these 14.67 % were formed between 1889 and 1895, 19.41 % between 1896 and 1900, 22.71 % between 1901 and 1905, 17.34 % between 1906 and 1910, and 13.18 % between 1911 and 1915. Whilst in the east and in Mecklenburg there has been a pause in the organization of these societies, the west and south of Germany, with the exception of Alsace-Lorraine, have organized the greatest number of new societies during this period.

The total number of members amounted to 252,524 belonging to 2,168 societies in 1914; 257,535 belonging to 2,194 societies in 1915; 269,936 belonging to 2,219 societies in 1916; 282,335 belonging to 2,247 societies in 1917, and finally 248,710 belonging to 2,213 societies in 1918. The large decline of 34,000 members, in round figures, in the last year is accounted for by the decline in the number of federations which sent in reports, especially Mecklenburg, Rhenish-Prussia III, Alsace-Lorraine I and II: this last district alone, at the end of 1916-17, had a membership of 37,509.

The same reason partly accounts for the decline in the average number of members of co-operative buying societies, which worked out at 114 in 1917-18, as compared with 126 in 1916-17, 122 in 1915-16 and 117 in 1914-15.

§ 2. COMPOSITION OF THE WORKING CAPITAL.

To carry on their double function of buying agricultural requisites and selling agricultural products the co-operative societies must have an

adequate working capital consisting partly of capital owned by the societies and partly of capital borrowed from outsiders.

1. The owned capital consists of the share capital, reserve funds and business reserves of the various societies. The total share-capital during the years of the war is given in Table IV.

TABLE IV. — *Total Share Capital from 1914 to 1918 (in marks).*

Year	Total amount	Average	
		per society	per member
1914	3,983,926	1,838	16
1915	4,288,097	2,184	18
1916	4,167,251	2,213	17
1917	5,416,534	2,402	19
1918	5,765,856	2,777	25

The total amount of share capital has increased considerably, by nearly 50 per cent. The greatest increase occurred in the third year of the war, 1917, when the total increased from 4,167,251 marks in 1916 to 5,416,534 marks, that is by nearly 1,000,000 marks. The average, both for societies and members, increased in the same proportion, about 50 per cent.

The total of the reserve funds and the business reserves reached, during the years in question, nearly three times the total share capital.

TABLE V. — *Total of Reserve Funds and Business Reserves from 1914 to 1918 (in marks).*

Year	Total	Average	
		per society	per member
1914	9,587,430	4,422	38
1915	10,294,087	4,692	39
1916	12,254,816	5,926	50
1917	15,435,252	6,845	55
1918	17,530,775	8,165	73

Here also, we note during the war an uninterrupted increase specially marked in the third year of war, 1917, in which year the total of the reserves rose from 12,254,816 marks to 15,435,252 marks. The total sum, as well as the average per society and per member, nearly doubled. Adding

together the totals of the two sources of capital above mentioned, we get the following result as the total owned capital:

TABLE VI. -- *Total Owned Capital of the Societies.*

Year	Marks
1914	13,571,356
1915	14,582,184
1916	16,722,067
1917	20,851,786
1918	23,296,631

The owned capital of the co-operative societies for purchase and sale has, therefore, increased during the war by 10 millions of marks in round numbers, that is, it has nearly doubled in comparison with the total reached in the last pre-war year.

2. The borrowed capital which is at the disposal of co-operative societies, normally amounts to more than the owned capital, as can be seen from Table VII:

TABLE VII. — *Total Borrowed Capital of the Societies.*

Year	Marks
1914	67,051,530
1915	68,014,114
1916	66,665,592
1917	79,124,549
1918	88,220,196

If we compare the owned capital of the co-operative societies for purchase and sale with the capital borrowed by them, before the war and in 1918, we see that (contrary to what we noticed in the case of the agricultural credit societies) there has been an increase in the ratio of owned to borrowed capital.

It has, in fact, changed from 1 : 5 in 1914 to 1 : 4 in 1918. It would, however, be advisable, in order to improve the economic status of the co-operative societies, further to increase the owned capital, by increasing the share capital and the reserves.

3. By adding together owned and borrowed capital we obtain the total working capital of the co-operative societies during the years of the war.

TABLE VIII. — *Total Amount of the Working Capital.*

Year	Marks
1914	80,622,886
1915	82,596,298
1916	83,387,659
1917	99,976,335
1918	111,516,827

The total working capital has, therefore, increased, during the war, by 30 million marks in round numbers — from 80 million marks in 1914 to 111 million in 1918.

Table IX shows the distribution of co-operative societies for purchase and sale, according to the amount of their working capital, during the years of the war.

TABLE IX. — *Distribution of Societies according to Working Capital.*

Working capital Marks	Number of co-operative societies during the years				
	1914	1915	1916	1917	1918
Less than 500	66	58	73	83	89
500— 1,000	130	135	141	152	157
1,000— 2,000	195	199	223	272	276
2,000— 3,000	152	172	192	218	215
3,000— 4,000	147	142	158	183	159
4,000— 5,000	117	126	130	128	147
5,000— 6,000	89	77	109	108	100
6,000— 7,000	87	89	86	102	83
7,000— 8,000	75	81	94	69	67
8,000— 9,000	65	69	50	75	74
9,000— 10,000	65	71	66	63	63
10,000— 20,000	393	364	361	346	310
20,000— 30,000	164	177	153	127	118
30,000— 40,000	91	77	65	72	57
40,000— 50,000	56	64	54	37	22
50,000— 60,000	42	37	33	24	34
60,000— 70,000	23	30	23	23	18
70,000— 80,000	13	16	18	11	11
80,000— 90,000	15	14	15	17	
90,000— 100,000	11	15	13	12	10
100,000— 250,000	73	82	67	75	59
250,000— 500,000	24	26	29	27	39
Over 500,000	29	29	30	31	41

We see in Table IX that the largest group of co-operative societies is that with a working capital of from 10,000 to 20,000 marks, but this group, as also all those having over 20,000 marks working capital, has decreased numerically, during the war, whereas those with less capital (up to 7,000 marks) have increased. The only exception to this rule is the last group, with over half a million of marks capital, which has increased from 29 societies in 1914 to 41 in 1918.

§ 3. COLLECTIVE PURCHASE.

The war has caused very characteristic changes as regards collective purchase, both in the extent and nature of the business. Co-operation for purchase of agricultural requisites, which during times of peace was constantly developing, diminished during the war.

The total value of goods dealt with declined in spite of their increased price. This decline was, as we shall see, insignificant but it was essentially symptomatic, and only to be explained by the special circumstances of war economy. At the outbreak of the war, international economic bonds were loosened, world commercial exchanges lost their normal value, and the importation of goods almost ceased. Germany no longer received cattle feeds from the east, nor chemical fertilizers from over-seas. This general lack of foreign goods was naturally reflected in the reduced purchases made by the co-operative societies. On the other hand goods that were obtainable could not be freely bought by the societies because of requisitions, limitations imposed on freedom of trade, maximum prices and other government measures. We thus explain the decline of purchases by co-operative societies; we cannot, however, give an accurate statement of the value of this decline for the several kinds of requisites during the war years as comparable data are lacking for they refer from year to year to different numbers of societies. Nevertheless so as to give a general idea of this branch of co-operative activity, we give in Table X (pages 673 and 674) the data relating to the quantities and values of fertilizers, cattle feeds, and seeds sold during the war by different federations.

Table X shows a decrease in the value of agricultural requisites purchased during the war, after some fluctuations in value, from 164,133,879 marks in 1914 to 159,621,555 marks in 1918, i. e. a decline of nearly 5 millions of marks.

A better idea of the amount of goods purchased by the co-operative societies is obtained by considering the weight of the goods than their money value, since the purchasing power of money diminished very greatly during the last years of the war. We notice that chemical fertilizers declined greatly in 1917, the third year of the war. The reduction amounted to nearly 4 millions of half-quintals, from 17 millions of *zentner* in 1914 to 13 millions in 1917; in 1918, however, they reached 19 millions: this is explained by the fact that instead of fertilizers containing a high percentage of phosphoric acid, potassium salts and especially kainit were used. Feeding stuffs decreased from 9 million half-quintals in 1914 to 3 ½ in 1918, a decrease of nearly 60 %. Seeds are the only things which increased in quantity, by nearly one third as compared with 1914.

The purchases of agricultural requisites by the central co-operative societies for purchase (whose working during the war we have described in an article published in our issue of August) increased considerably; in 1918 the last year of the war, they were double the purchases of 1914. Table XI (page 675) shows the value of goods purchased by them in the different years.

TABLE X. — *Quantity and Value of Agricultural Requisites Sold by the Federations from 1914 to 1918.*

Districts of the Federations	1914					1915				
	No of co-operative societies for purchase	Quantities of fertilizers supplied (in half quintals)	Quantity of feeding stuffs supplied (in half quintals)	Quantity of seeds supplied (in half quintals)	Sale value of agricultural goods supplied (including machinery) (in marks)	No of co-operative societies for purchase	Quantity of fertilizers supplied (in half quintals)	Quantity of feeding stuffs supplied (in half quintals)	Quantity of seeds supplied (in half quintals)	Sale value of agricultural goods supplied (including machinery) (in marks)
England	1	38,238	20,134	362	424,513	1	67,792	112,133	21,186	425,333
East Prussia	7	416,344	120,773	8,273	3,500,038	6	225,099	23,029	5,622	1,915,350
Brandenburg	4	247,990	33,302	3,011	1,400,039	4	284,413	77,334	3,399	1,800,212
Pomerania	22	524,715	1,181,336	60,718	34,335,442	23	5,455,636	1,045,454	67,423	29,756,716
Povania I	22	431,659	1,70,112	22,954	10,094,189	22	236,020	121,913	3,732	8,709,767
Povania II	16	342,147	187,611	4,365	4,001,994	17	226,949	110,069	2,933	19,694,481
Silesia I	2	175,136	47,519	43,860	5,344,432	1	141,111	50,021	—	6,134,772
Silesia II	31	472,154	300,813	10,377	5,586,118	51	2,751,437	1,379,150	17,602	6,382,272
Province of Saxony	43	800,115	206,665	3,950	3,401,713	41	724,069	401,973	35,936	14,771,332
Schleswig Holstein	102	2,518,118	1,756,111	21,487	16,797,984	180	2,069,570	1,544,210	14,916	15,903,632
Hanover	187	1,233,384	1,317,390	8	1,367,730	202	1,144,766	1,114,984	40,540	19,024,472
Westphalia I	2	1,953,514	206,407	17,821	17,020,013	20	1,828,638	1,114,984	70,801	19,114,222
Westphalia II	226	78,127	35,685	4,899	2,015,333	66	35,991	78,738	1,424	1,530,046
Nassau	66	514,182	—	14,418	5,065,748	135	505,433	370,383	22,044	4,825,332
Rhenish Prussia I	137	—	—	—	13,370,866	78	—	—	—	13,242,701
Rhenish Prussia II	76	—	—	—	—	—	—	—	—	—
Rhenish Prussia III	—	—	—	—	—	—	—	—	—	—
Bavaria	141	437,670	246,090	27,021	4,366,367	112	364,647	225,497	25,833	4,204,733
Palatinate	77	730,986	1,014,118	27,250	10,999,951	75	808,349	966,504	34,859	9,621,463
Kingdom of Saxony	—	—	—	—	—	25	—	—	—	861,443
Württemberg	726	1,270,773	481,000	34,474	8,280,307	726	1,085,604	339,535	35,203	7,292,944
Baden	111	469,619	391,207	24,133	6,969,047	113	336,721	306,936	27,102	5,515,541
Hesse	81	977,130	594,449	8,888	7,905,539	80	745,811	1,306,157	6,172	10,246,988
Oldenburg	1	1,865	—	—	5,302	1	—	—	—	5,868
Mecklenburg	2	—	—	—	—	3	—	—	—	31,048
Alsace-Lorraine I	23	124,560	40,740	4,130	890,430	23	34,990	33,740	740	545,470
Alsace-Lorraine II	—	—	—	—	—	—	—	—	—	—
	2168	17,409,651	8,911,978	342,246	164,133,879	2194	18,035,940	9,758,700	417,680	176,518,911

TABLE X (continued). — Quantity and Value of Agricultural Requisites Sold by the Federations from 1914 to 1918.

Districts of Federations	1916					1917					1918				
	No of co-operative societies for purchase	Quantity of fertilizers sup- plied (in half quintals)	Quantity of feeding stuffs supplied (in half quintals)	Quantity of seeds supplied (in half quintals)	Sale value of agricultural goods supplied (including machinery) (in marks)	No of co-operative societies for purchase	Quantity of fertilizers sup- plied (in half quintals)	Quantity of feeding stuffs supplied (in half quintals)	Quantity of seeds supplied (in half quintals)	Sale value of agricultural goods supplied (including machinery) (in marks)	No of co-operative societies for purchase	Quantity of fertilizers sup- plied (in half quintals)	Quantity of feeding stuffs supplied (in half quintals)	Quantity of seeds supplied (in half quintals)	Sale value of agricultural goods supplied (including machinery) (in marks)
Rhinland	10	133,608	18,409	1,525	222,834	12	149,283	21,735	635	599,950	12	199,799	3,448	531	573,661
Rast Prussia	6	421,570	41,638	7,635	4,855,213	—	—	—	—	—	—	343,866	59,222	7,579	812,687
Brandenburg	4	252,795	81,453	3,231	1,576,837	4	102,150	302	5,230	2,250,441	4	147,678	4,707	4,064	1,961,445
Pomerania	22	442,705	1,095,821	42,049	35,116,499	22	439,030	1,616,748	45,633	45,633,394	22	460,291	1,067,832	36,259	42,680,075
Posenania I	22	246,117	143,661	12,471	5,488,465	22	596,052	295,057	6,788	7,111,156	22	539,217	149,236	32,543	5,420,022
Posenania II	17	222,433	121,142	5,543	3,649,210	17	262,776	2,635,071	16,499	10,072,802	18	197,352	128,213	9,436	9,938,972
Silesia I	1	—	—	—	—	1	12,000	214	—	—	1	12,265	260	—	130,963
Silesia II	46	126,665	100,029	299	9,422,150	45	—	—	—	12,217,147	46	448,681	892,387	14,436	10,580,116
Prov. of Saxony	40	965,120	220,560	31,336	5,510,699	42	270,897	824,475	20,211	3,671,738	39	245,808	33,550	48,606	2,493,334
Schleswig-Holstein	113	1,428,518	783,466	128,037	5,394,588	113	731,893	1,070,024	4,280	4,994,007	128	850,793	33,356	6,448	4,657,143
Hanover	195	1,566,184	671,078	18,858	13,602,140	209	1,631,126	298,777	8,172	11,439,702	135	1,447,748	240,501	39,946	7,451,986
Westphalia I	13	6,680	2,606	13	41,080	2	—	—	—	10,616,832	—	8,697	8,600	75	—
Westphalia II	228	1,692,661	961,228	72,628	22,255,624	234	2,099,348	509,813	46,010	20,755,081	239	2,137,388	359,274	63,794	15,054,218
Nassau	64	46,682	961,228	35,520	1,324,607	24	429,065	81,322	2,897	13,597,226	27	40,636	228	1,244	968,773
Rhenish Prussia I	139	391,501	211,944	3,917	3,495,001	141	457,467	136,452	54,320	5,206,043	160	474,441	51,350	25,664	6,102,960
Rhenish Prussia II	76	—	—	—	15,700,407	73	—	—	—	22,683,968	78	—	—	—	19,517,871
Rhenish Prussia III	2	—	—	—	4,119	17	—	—	—	—	24	—	—	—	—
Bavaria	—	398,933	56,840	31,067	3,304,308	138	372,506	38,000	34,143	1,020,866	—	—	—	—	340,246
Fahtinate	142	756,728	691,434	18,550	11,649,995	75	—	—	—	3,186,031	76	336,955	19,335	7,994	3,012,024
Kingdom of Saxony	75	757,727	45,959	2,330	803,326	73	102,722	4,316	3,815	9,913,090	76	659,139	17,775	11,480	7,260,004
Wurttemberg	26	1,108,395	226,717	57,079	7,264,061	33	120,368	18,950	57,778	9,978,588	28	95,358	53,721	1,460	483,643
Baden	799	402,919	159,888	31,451	5,269,500	733	333,853	31,875	20,663	5,187,370	736	702,000	220,506	68,850	6,918,839
Hesse	156	—	—	—	—	167	980,910	156,350	16,978	4,749,392	168	573,486	77,588	26,449	5,645,761
Oldenburg	76	582,039	437,904	19,177	7,363,595	67	—	—	—	—	75	5,773,011	169,834	51,426	5,402,213
Mecklenburg	—	—	—	—	12,671	1	—	—	—	3,756	—	—	—	—	—
Alsace-Lorraine I	3	—	—	—	24,488	3	—	—	—	21,133	—	—	—	—	—
Alsace-Lorraine II	23	60,460	44,300	8,030	1,180,630	23	59,930	43,860	12,640	1,554,890	—	—	—	—	—
	2,219	19,900,609	12,146,132	504,818	166,486,822	2,255	13,736,986	6,625,419	433,642	18,695,729	2,213	19,773,676	3,785,962	458,193	159,691,555

TABLE XI. — *Value of Agricultural Requisites bought through the 28 Central Co-operative Societies affiliated to the National Federation.*

Year	Millions of marks
1914	191.8
1915	208.5
1916	259.3
1917	351.6
1918	348.1

The value increased from 191.8 millions of marks in 1914 to 348.1 in 1918. But here again, if we consider the total quantity purchased, the situation is less favourable, as is shown in Table XII.

TABLE XII. — *Quantity of Agricultural Requisites bought through the 28 Central Co-operative Societies affiliated to the National Federation.*

Year	Half quintals
1914	64,512,141
1915	64,765,984
1916	62,961,523
1917	67,754,846
1918	64,755,572

After a decline in quantity in 1916 there is an increase in 1917 and in 1918 the figure is again that of pre-war period. Although collective purchases were also made by the agricultural credit societies, by co-operative dairies and by the co-operative societies for storing grain, it can be said that during the war co-operative societies did not increase their purchases. This, as we have already pointed out, was due partly to the lack of the necessary goods in the country, partly to legislation which prevented these goods being freely sold to the public and the co-operative societies.

§. 4. COLLECTIVE SALE.

The sale of agricultural products by the co-operative societies reveals a totally different situation. Before the war this branch of co-operation was developing slowly as compared with co-operative purchase. This comparatively recent form of co-operative enterprise lacked that full knowledge of the technical and economic aspects of commerce which is indispensable for the prosperity of the difficult business of selling. If we consider the value and quantity of agricultural products sold by the co-operative societies during the last five years before the war we can easily see the practically stationary condition of this business.

TABLE XIII. — *Value and Quantity of Agricultural Products sold from 1910 to 1914.*

Year	Value of agricultural products sold		Quantity of cereals sold		Quantity of potatoes sold	
	No. of co-operative societies	Marks	No. of co-operative societies	Marks	No. of co-operative societies	Marks
1910	205	59,982,947	236	7,094,271	41	457,984
1911	222	63,047,313	212	6,817,633	41	578,053
1912	228	52,373,542	213	6,208,535	66	642,525
1913	156	61,302,827	130	7,109,431	53	601,271
1914	126	61,213,847	249	7,469,157	44	788,883

Although a comparison of the different years in this case, as in the case of purchases, is not quite correct, as the statistical data for the several years contain much that is not comparable, yet on consulting Table XIII we see a notable increase only in the sale of potatoes, whereas, both the quantity of cereals, and the total value of agricultural products sold show only a small increase.

The war brought about entirely new conditions for the further and more ample development of this form of trade. During the war the home markets were organized and efforts were made to meet their needs by invoking the active collaboration of every organization in the country which could in any way assist in the matter. We have already seen, in the article published in our August issue, in what measure and with what success the co-operative societies answered to this call. Here we will content ourselves with giving the figures which show the extent of this collaboration in the matter of provisioning the people and the army during the war years. Table XIV shows the value of agricultural products sold during the war by the various federations.

We see that the sale value constantly increased during the war. From 80 million marks in 1914 it grew to 112 million in 1915, to 124 million in 1917 and to 273 million in 1918; thus during the war the value of goods sold by the co-operative societies increased three-fold. Most of this increase was due to the Pomeranian Federation, whose sales rose from 44 million marks in 1914 to 182 million marks in 1918, thus quadrupling their value. The Federation of Posnania, District I, grew from 2½ million marks in 1914 to 34½ millions in 1918. The tendency to an increase in value of sales of agricultural goods is general. That it is not a question of a fictitious increase, caused by the lesser buying power of money, is proved by the quantities of cereals and potatoes sold through the co-operative societies during the same period.

TABLE XIV. — *Value of Agricultural Products sold from 1915 to 1918.*

Federations	1915		1916		1917		1918	
	No. of co-operative societies	Marks	No. of co-operative societies	Marks	No. of co-operative societies	Marks	No. of co-operative societies	Marks
Eastland	1	—	10	265,289	12	1,537,690	7	1,336,171
West Prussia	6	—	6	181,028	—	—	12	3,628,243
Brandenburg	4	2,739,397	4	3,077,520	4	2,704,389	4	2,896,929
Pomerania	22	44,149,356	22	65,171,909	22	113,980,449 ^a	22	182,674,594
Posnania I.	23	2,717,476	22	375,526	22	29,879,561	22	34,112,304
" II.	17	19,694,481	17	16,661,376	17	30,099,969	18	17,373,732
Silesia I.	1	—	1	—	1	—	1	—
" II.	51	—	46	1,313,534	45	—	46	667,505
Province of Saxony . .	41	244,623	40	—	22	29,037,459	39	834,271
Schleswig-Holstein . .	110	—	113	—	118	2,083	128	73,997
Hanover	180	803,676	195	243,639	209	179,859	125	480,198
Westphalia I.	2	1,594,165	3	20,318	2	—	2	—
" II.	230	—	228	—	234	256	239	—
Nassau	66	2,705	64	—	64	—	67	—
Rhenish Prussia I. .	135	119,585	139	267,760	141	99,257	160	42,064
" " II.	78	—	76	—	73	—	78	—
" " III.	—	—	2	—	1	—	—	—
Bavaria	—	—	—	—	17	4,517,610	24	4,120,699
Palatinate	142	212,999	142	—	138	—	136	25,162
Kingdom of Saxony . .	75	8,712,934	75	14,325,673	75	17,265,830	76	1,2553,776
Wurtemberg	25	—	26	1,277,878	34	4,208,818	28	3,061,325
Baden	726	—	729	—	733	7,044,357	736	—
Hesse	152	27,121	156	—	157	982,857	168	326,433
Oldenburg	80	207,016	76	12,030	67	40,542	75	2,005,852
Mecklenburg	1	—	1	5,091	1	—	—	—
Alsace-Lorraine I. .	3	—	3	—	3	—	—	—
" " II.	23	20,750	23	127,889	23	166,551	—	—
Total	2,194	81,246,584	2,219	112,325,951	2,255	241,847,537	2,213	273,518,482

TABLE XV. — *Quantity of Cereals and Potatoes sold from 1915 to 1918.*

Year	Cereals		Potatoes	
	No. of co-operative societies	Half quintals	No. of co-operative societies	Half quintals
1915	145	7,585,271	47	1,081,462
1916	176	9,270,943	57	970,113
1917	191	12,655,839	52	2,374,259
1918	192	14,229,050	63	3,533,521

The quantity of cereals sold was doubled and the quantity of potatoes was trebled during the war. The proportion between the total value of goods sold collectively and goods bought collectively has changed during the war as follows:

TABLE XVI. — *Value of Collective Purchases and Sales from 1914 to 1918.*

Years	Value of purchases (marks)	Value of sales (marks)
1914	164,133,879	61,213,847
1915	176,518,911	81,246,584
1916	166,486,822	112,325,951
1917	184,695,729	241,847,537
1918	159,621,555	273,518,482

Whilst at the beginning of the war the total value of collective purchases was greater by two-and-a-half times than that of the sales, in 1915 the proportion had declined to twice, in 1916 to one-and-a-half times, in 1917 the value of sales was about one-and-a-third times as great as the purchases and in 1918 over one-and-a-half times as great.

We find almost the same state of affairs if we examine the total value of the purchases and sales of the central co-operative societies for purchase and sale during the period from 1914 to 1918; these are shown in Table XVII.

TABLE XVII. — *Value of Goods Bought and Sold
by the Central Co-operative Societies.*

Year	Value of purchases (millions of marks)	Value of sales (millions of marks)
1914	191.3	73.8
1915	208.5	94.5
1916	259.3	199.9
1917	351.6	221.6
1918	348.1	323.6

Here, too, the total value of purchases is, in the last year of peace, almost three times the value of the sales, but thence onward in consequence of the more rapid development of the sales as compared with the purchases the two totals are almost equal in the last year of the war. The difference, which before the war was of nearly 117.5 millions of marks in favour of the purchases, declined to barely 24.5 millions in 1918.

§ 5. TOTAL BUSINESS DONE AND NET PROFITS OF THE CENTRAL
CO-OPERATIVE SOCIETIES.

The total business done, that is the total of purchases and sales, were as follows during the war :

Year	Millions of marks
1914	265.9
1915	303.1
1916	459.3
1917	573.2
1918	671.7

Thus during the war the total business done became two-and-a-half times as great as it was in 1914.

The total net profits of the principal central co-operative societies belonging to the National Federation, expressed in actual figures and in percentages of the total business done were as follows :

Year	Total net profit (in millions of marks)	The net profit expressed as a percentage of the total business done
1914	2.12	0.85
1915	2.76	0.98
1916	9.55	2.21
1917	6.43	1.32
1918	5.01	0.93

The situation of the central co-operative societies appears to be very favourable from the financial point of view, the net profits having increased from 2 million marks in 1914 to 5 millions in 1918, i. e. two-and-a-half times. If, however, they are considered in relation to the total business done, these profits are not much above those of the last year of peace 1914; this is accounted for by the unexampled increase in expenses.

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In short we can say that the growth of co-operative societies for purchase and sale and the development of their purchasing operations was restricted by the war, but, on the other hand, they greatly increased their sale business. Thus by shifting their economic centre of gravity from buying to selling, they were able to participate successfully in the economic life of the country and add their contribution to its economic resistance.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

GERMANY

FORMATION OF CO-OPERATIVE SOCIETIES FOR RECLAIMING LAND IN PRUSSIA.

— *Illustrierte Landwirtschaftliche Zeitung*, No 67-68 Berlin, 17 July 1920.

The Law of 5 May 1920 for the formation of co-operative societies for reclaiming land, seeks by suitable use of marshy, moorland and similar lands, not only to bring the land into better condition, but to open up new land for cultivation, thus providing in the country itself a larger area of land for growing the food of the nation.

According to the law, owners of marshy, moorland, or similar lands can form themselves into co-operative societies for the transformation of such land (after first having regulated the watercourses and at the same time built roads and carried out the necessary drainage and irrigation works) into fields, meadows, pasture-land or woods, to manage them as required and to cultivate them. These alterations must be carried out with the greatest regard to the preservation of natural beauty spots and natural defensive positions. The procedure for the formation of these co-operative societies will be under the direction of the President of the *Landeskulturamt* who will also provide for the supervision of the society until the work of reclamation has been finished; he will nominate a commissioner to treat with the parties interested. The rules, to be drawn up by the commissioner in agreement with the members of the society, must be approved by the Minister of Agriculture. The president and officers of the co-operative society will be elected by the members but will act under State control. The supervising authority is authorized immediately to carry out the regulations it may make. The importance of this law lies in the possibility of rapidly putting under cultivation, managing and utilizing marshy and infertile lands even against the will of their owners.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN IRELAND IN 1918-19. — Report of the Irish Agricultural Organisation Society, Ltd., for the year ending 31st March, 1919. Dublin, 1920.

— COFFEY (D.): Another Year's Work of the I. A. O. S., in *Better Business*, No. 2. Dublin, February 1920.

The fact that the cessation of hostilities occurred within the period to which the latest Report of the Irish Agricultural Organisation Society refers, gives the Committee occasion to remark upon the manner in which the agricultural co-operative movement in Ireland had stood the crucial

test of the war-years. "Its steady growth and remarkably rapid development in a few directions," says the Report, "afford yet another proof of the superiority of co-operative organization under conditions of stress. The societies have not only held together, but have also improved their buildings and equipment as well as their business methods, and have increased their output to an extent greater than during any other period."

General Progress. — The following table shows the general progress made by the movement in 1918:

TABLE I. — *General Statistics, 1917, 1918.*

	1917	1918	Increase
Total Number of Societies	937	950	13
Number of Societies furnishing Returns . .	677	799	—
Membership	113,640	117,484	3,844
	£	£	£
Paid up Share Capital	272,781	324,673	49,992
Loan Capital	370,973	551,112	80,139
Total Turnover	7,374,438	9,087,668	1,513,230
Average Turnover per Society	8,000	9,576	1,576
Average Turnover per Member	66	77	11

The figures for the two years are not strictly comparable, owing to the much larger proportion of societies which furnished returns in 1918 than in 1917. Generally speaking, however, it is societies which have not commenced or have ceased to do business, or the less active societies which fail to furnish returns, so that the results would not be very different if more complete returns could be obtained.

The total turnover of the societies from the inception of the movement in 1889 to the end of 1918 was £62,286,691, of which £42,577,383 represented sales of butter and other produce, £18,909,149 sales of agricultural requisites, etc., and £800,159 advances made by agricultural banks.

Creameries. — We now give statistics of the co-operative creameries in 1917 and 1918 (Table II, page 682).

Several points are clearly brought out by these statistics. It will be noted, for instance, that the societies have considerably increased their loan capital (which includes bank overdrafts) without correspondingly increasing their share capital. The growing extent to which cheese-making is being taken up by the societies is also noticeable. The dairy societies were impelled to this change of practice by the policy of the Food Controller in relation to cheese and the change would probably have been more marked had the societies been able more easily to provide the neces-

sary building and plant and to secure the services of qualified persons to make the cheese. Most striking, however, is the decrease in the amount of milk received by the creameries. The diminution of the milk supply is a general phenomenon throughout Ireland, and is of such importance that it is the subject of investigation of two Commissions. The higher prices prevailing in 1918 caused the value of the butter sold in that year to be higher than in 1917, although the quantity was considerably less.

TABLE II. — *Statistics of Creameries, 1917 and 1918.*

	1917	1918	Increase (+) or decrease (-)
Number of Dairy Societies	337	339	+
Number of Auxiliaries (not separately registered)	98	98	—
Membership	50,052	49,810	—
	£	£	£
Paid up Share Capital	163,313	172,970	+
Loan Capital	168,546	266,731	+
Sales: Butter	4,273,789	4,542,880	+
Cheese, cream and milk	315,645	738,254	+
Other sales	650,445	658,362	—
Total Sales	5,239,879	5,939,496	+
Nett Profit	10,235	61,458	—
Loss	2,375	15,629	—
Reserve Fund	301,241	332,638	+
Gallons of Milk received	93,499,391	82,642,726	—
Pounds of Butter made	37,477,349	31,017,515	—

The slight diminution in the membership is possibly due to the fact that a few societies were dissolved in 1918. The number of societies has been maintained undiminished by the formation of new societies, but these naturally would not have as many members as the old-established societies which are lost to the movement.

Agricultural Societies. — This class of society is primarily intended for the supply of agricultural requisites, but there is a growing tendency to supply household requirements as well, which accounts in large measure for the considerable increase in the business of these societies shown in Table III (page 683).

The growing complexity of the business of these societies emphasizes the necessity for highly qualified and well-paid managers. Difficulty is being experienced in finding suitable men, but a training scheme is being carried out under the direction of a joint committee of the Irish Agricul-

tural Organisation Society, the Irish Agricultural Wholesale Society, the Co-operative Reference Library, and the Irish Sectional Board of the Co-operative Union.

TABLE III. — *Statistics of Agricultural Societies, 1917 and 1918.*

	1917	1918	Increase
Number of Societies	261	279	18
Membership	31,200	34,818	3,618
	£	£	£
Paid up Share Capital	49,862	73,194	23,332
Loan Capital	94,594	147,125	52,531
Total Sales	691,943	995,290	303,347
Nett Profit	17,147	22,941	—
Loss	930	2,595	—
Reserve Fund	33,921	46,527	12,606

Credit Societies. — The utility of the agricultural credit societies has largely diminished as a result of the increased agricultural prosperity and many of them have ceased to do business. Of these, 33 have been eliminated from the statistics for 1918. Table IV contains statistics of the credit societies in 1917 and 1918.

TABLE IV. — *Statistics of Credit Societies, 1917 and 1918.*

	1917	1918	Increase (+) or decrease (—)
Number of Societies	171	138	— 33
Membership	17,139	15,881	— 1,258
	£	£	£
Loan Capital	9,693	7,968	— 1,725
Deposits	34,179	48,675	+ 14,496
Total Capital	43,872	56,644	+ 12,772
Loans Granted	41,993	33,453	— 8,540
Number of Loans Granted	4,792	3,640	— 1,152
	£	£	£
Loans Outstanding	43,457	36,151	— 7,306
Expenses	854	792	—
Nett Profit	357	294	—
Loss	48	89	—
Reserve Fund	4,521	4,133	— 388

As an indication of prosperity the increase of the deposits is satisfactory, but there seems some doubt as to whether the societies can continue to justify their existence as credit societies. It is possible, however, that if the prices of agricultural produce fall from their present high level, there will again be an opportunity for the societies to prove their utility.

Poultry Societies. — The number of poultry societies is small, but their business is substantial and increasing. One of them, the North Kilkenny Society, sold eggs and poultry in 1918 to the value of nearly £60,000. The following table contains particulars of this class of society in 1917 and 1918 :

TABLE V. — *Statistics of Poultry Societies, 1917 and 1918.*

	1917	1918	Increase (+) or decrease (-)
Number of Societies	12	12	—
Membership	3,582	3,634	+ 58
	£	£	£
Paid-up Share Capital	1,515	1,534	+ 19
Loan Capital	4,391	3,390	— 1,001
Total Sales	164,688	229,441	+ 64,753
Nett Profit	4,094	3,673	—
Reserve Fund	10,604	12,694	+ 2,090

A small proportion of the total sales represents the supply of requisites, but the great bulk of the trade is in poultry and eggs.

Flax Societies. — The primary object of these societies is the working on co-operative lines of flax-scutching mills, but the total turn-over shown in Table VI includes, besides scutching receipts, value of tow and sales of seeds.

TABLE VI. — *Statistics of Flax Societies, 1917 and 1918.*

	1917	1918	Increase
Number of Societies	14	29	15
Membership	995	2,357	1,362
	£	£	£
Paid-up Share Capital	5,925	14,831	8,906
Loan Capital	6,428	11,255	4,827
Buildings and Plant	12,751	27,766	15,015
Turnover	8,662	21,300	12,638
Net Profit	2,029	2,742	—
Loss	7	572	—
Reserve Fund	3,725	6,734	3,009

The remarkable increase shown by these societies corresponds to the increased production of flax in Ireland occasioned by the great demand for linen, particularly for the manufacture of aeroplanes. Most of the societies are in the Province of Ulster, to which flax-growing was previously almost exclusively confined, but there is one successful society in the Province of Leinster.

The relative importance of the flax societies cannot be gauged by their turnover. It must be remembered that they do not, as the creameries do, buy raw material and sell a manufactured article. They are merely paid for scutching the flax, that is for putting it through one of the essential processes of manufacture. The flax remains throughout the property of the member, who sells it on his own account after it has been scutched; the sales of flax do not, therefore, figure in the turnover of the society.

Miscellaneous Societies.—The number of miscellaneous societies has increased from 34 to 43, the new societies being mainly registered for milling business. The great difficulty in obtaining plant and raw material has, however, hampered the development of the milling societies. Table VII contains particulars of the miscellaneous societies.

TABLE VII. — *Statistics of Miscellaneous Societies, 1917 and 1918.*

	1917	1918	Increase (+) or decrease (-)
Number of Societies	34	43	+
Membership	9,579	10,494	+
	£	£	£
Paid-up Share Capital	30,321	35,474	+
Loan Capital	28,926	14,528	—
Total Sales	321,490	473,271	+
Net Profit	10,482	7,009	—
Loss	205	328	—
Reserve Fund	6,716	9,304	+

The bulk of the turnover shown in the foregoing table is made up by the Wexford Meat Supply Society, which increased its sales from £140,000 in 1917 to £235,221 in 1918, and the Roscrea Bacon Factory, of which the turnover was £162,713 in 1918 as compared with £151,108 in 1917. The increase in the sales of the Roscrea Bacon Factory would have been larger but for the control of pig-curing, which limited the production of all bacon factories.

Federations.—The Irish Co-operative Agency Society increased its turn-over from £454,207 in 1917 to £481,176 in 1918. "This is the more remarkable," says the Report of the Irish Agricultural Organisation

Society, "as the Government control of the distribution of butter, which was in operation since October 1917, arrested the development of the Society's growing export trade. Under the control, the Society cannot export butter from Ireland direct to its customers in Great Britain, but fortunately it has been able to act through its depôts as distributors under the Ministry of Food in Great Britain and thus, to some extent, maintains its connection with many of its old customers there."

The progress of the Irish Agricultural Wholesale Society in 1918 was very striking as is indicated by the following table.

TABLE VIII. — *The Irish Agricultural Wholesale Society in 1917 and 1918.*

	1917	1918	Increase
Number of Federated Societies	334	379	45
Paid-up Share Capital (1)	£ 21,216	£ 25,976	£ 4,760
Loan Capital	24,216	27,379	3,163
Total Sales	651,567	914,241	262,674
Net Profit	5,577	7,527	—
Reserve Fund	11,460	13,072	1,621

(1) Including preference shares held by individual shareholders.

The increase in the sales would probably have been even greater but for the restrictions in trading, the shortage in various kinds of commodities and the lack of transport facilities.

ITALY.

1. THE "ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE" IN 1919. — Relazione del Consiglio d'amministrazione sul sesto esercizio e sul bilancio al 31 dicembre 1919. Rome, 1920.

The Committee of Management of this prosperous institution, which was formed for the purpose of supplying credit to the various kinds of legally constituted co-operative societies and to their consortia, has recently published its sixth Report. In view of the great and daily increasing work which the *Istituto* is carrying on, we think it desirable to give some account of its activity in 1919.

The Report draws attention to the remarkable recent development of the co-operative societies for production and labour (*cooperazione di produzione e lavoro*). During the year in question 80 co-operative societies and consortia were granted credits to the total amount of 18,351,000 lire,

guaranteed by the surrender of orders for payment from public administrations to the value of 33,197,577 lire. The region in which the largest number of co-operative societies were thus assisted was in Emilia (29), and the same region received the largest sum of credit (8,292,000 lire); next came Latium (16), Venetia and Tuscany. Adding to the new undertakings the previous undertakings which were in course of completion and the increases due to additional works, we find at the end of the year that 1,227 co-operative societies, numbering 249,800 members, had completed or were in course of carrying out works to the value of 291,750,000 lire.

These works were divided as follows: 196,815,000 lire among 897 co-operative societies in South Italy, with 189,800 members; 63,615,000 lire among 217 co-operative societies in Central Italy with 36,000 members and 31,320,000 lire among 113 co-operative societies in North Italy with 24,000 members. The business financed by the *Istituto* between 1 January 1914 and 31 December 1919 amounted to over 366 million lire. Large government contracts were entered into by the co-operative societies of Reggio Emilia and Modena, and by the consortia of Ravenna, Bologna, Ferrara, and Florence.

The *Istituto Federale di Credito per il Risorgimento delle Venezie* established by the decree of 24 March 1919, No. 497 (see our issue of February 1920, page 124), enabled the co-operative labour societies of Venetia to carry out their work in a thorough manner. In Trentino where co-operative societies had suffered very much during the war, and where co-operative labour societies were unknown, 56 co-operative societies were legally constituted with a share capital of 400,000 lire; they have a membership of over 9,000 workmen and have undertaken reconstructive work of over 7 millions of lire value.

The Report notes the great increase in the business done by the *distributive co-operative societies*, which to the number of 3,621 sold goods to the value of 1,218,400,000 lire, drawing directly or indirectly on the credit of the *Istituto Nazionale*.

The distributive co-operative societies have begun to federate themselves in regional organizations. They have formed 33 provincial federations which are to obtain their supplies from a single central organization; the *Consorzio italiano delle cooperative ed enti di consumo*, of Milan, and the *Consorzio nazionale di approvvigionamento*, of Genoa, recently established, are to act in this capacity.

The efficacy of this sort of co-operation, it is justly remarked, entirely depends on two indispensable factors, direct dealings with the producers, thus completely eliminating the middlemen, and strict regulation of collective purchases and the standardization of orders so as to secure cheaper rates and reduce expenses.

For the storage and distribution of certain goods the State availed itself of the special organizations formed by the co-operative societies and working under its supervision, such as the *Istituto cooperativo per gli scambi coll'estero*, which has the monopoly of trade in provisions with former enemy countries, and the *Consorzio nazionale cooperativo di importazione*.

As regards agricultural co-operation, the business operations of 1919 with the co-operative societies of northern, central and southern Italy amounted to 41,045,073 lire. The number of co-operative societies and of societies for the cultivation of communal lands (*università agrarie*) having direct or indirect relations with the *Istituto Nazionale* rose to 371 with 218,000 members and purchasers. Apart from the *università agrarie*, the 10,000 hectares of land directly farmed by the co-operative societies in 1918 had increased more than threefold by 31 December last and about 4,000 hectares of the land farmed was the property of the societies themselves.

There were 10,500 hectares under wheat on these farms, 4,200 hectares under other cereals (maize and rice), 15,860 hectares under hemp, beet, potatoes, tomatoes, forage crops and vines. These co-operative societies purchased live stock to the value of 11 ½ million lire; machinery to the value of 3 ½ millions; and other farm requisites for about 5 millions; they paid during the year 6,700,000 lire in wages to members and 2,250,000 lire to workers who were not members. Of the loans current at the end of 1919, amounting to 19,731,813 lire, one half may be taken as loans for plant and the other half for working expenses.

The progress made by the agricultural societies of Latium (*università agrarie*), was equally important, thanks to the advances made by the *Istituto*. The progress can be seen by comparing the following figures of the results obtained by these societies in the cultivation of cereals in 1918 and 1919: hectares farmed in 1918, 27,000, in 1919, 117,000; in 1918 under cereals 12,000 hectares, in 1919, 52,000 hectares. In 1918 there were 75,000 farmers belonging to the societies; in 1919 there were 180,000.

The *Federazione delle Università Agrarie* has recently been formed on a co-operative basis. A real need of such a federation was felt by the *università agrarie* which are corporate bodies (*enti morali*) but not co-operative societies.

The number of co-operative groups for the cultivation of the land is steadily increasing; besides those of Emilia and Romagna there are very strong ones in the districts of Cremona, Milan and Piacenza, in the provinces of Novara, Mantua and Verona, and they show a decided tendency to increase in the Tuscan plains, in Apulia, Basilicata and Calabria. In the islands there is also a spontaneous increase in agricultural associations composed of peasants and labourers; they pool their savings and ask insistently to be granted loans so that they may buy, or at any rate rent, large farms and lands (1).

The *Istituto Nazionale* is of opinion that this movement should be encouraged, whilst eliminating the unsuitable and exaggerated tendencies,

(1) By the Royal Decree of N° 516, published in the *Gazzetta Ufficiale* of 4 May 1920, N° 105, it was enacted that a Section for Land and Agricultural Credit should be formed in the *Istituto Nazionale di Credito per la Cooperazione*, so as to grant credit to *università agrarie* and associations of workers who own or rent land or who have become possessed of it by agreement. The initial capital of the Section was fixed at 50,000,000 lire.

on condition that it be wisely proportioned and disciplined, in the interest of agricultural workers themselves. It is especially advised that profits be used for the rapid extinction of debt on live stock and machinery, which are being paid for at very high prices, whilst wages should be reduced to a minimum.

In 1919 the *Istituto* discounted in all 25,543 bills for 310,079,993 lire, showing an increase of 6,900 bills and of over 148 million lire as compared with the previous year. The number of direct clients rose from 651 to 1,387 representing 5,370 co-operative associations (3,621 distributive societies, 1,227 societies for production and labour, 349 agricultural societies, 22 *università agrarie* and 151 miscellaneous societies). The bills discounted covered in round figures the following amounts: 144 million lire in business guaranteed by orders for payment from public administrations; 100 million and a half of lire in business guaranteed by liens on goods; 11 million lire and three quarters on commercial business; over 41 million lire in transactions guaranteed by liens on crops, etc.

The total business done for the six years amounted to 676,367,098 lire; the business done in the sixth year was almost equal to that transacted in all the previous years.

This is a short summary of the work performed by the Institute during the last year. It has constantly aimed at the moral and material uplift of the working classes to be attained gradually by means of co-operation.

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2. THE "ISTITUTO DI CREDITO PER LE COOPERATIVE" IN 1919. — Relazioni e bilancio approvati dall'assemblea degli azionisti del 7 aprile 1920. Milan, 1920.

Apart from the *Istituto Nazionale di Credito per le Cooperazione*, of which we have spoken in the foregoing note, there is in Italy another special institute for granting credit to co-operative societies: the *Istituto di Credito per le Cooperative*, of Milan, which completed its fifteenth working year in 1919. In that year it granted 3,798 loans to 466 co-operative societies and private individuals to the value of 65,914,682 lire 68 cent. as follows:

1,310	loans to	121	co-op. societies for production and labour	amounting to	24,325,907.71	lire
879	"	98	co-operative distributive societies	"	15,304,881.70	"
444	"	9	agricultural	"	6,229,920.00	"
102	"	5	credit	"	1,094,466.40	"
85	"	7	housing	"	1,003,500.00	"
978	"	226	miscellaneous co-op. soc. and to individuals	"	17,956,006.87	"

3,798 loans to 466 co-operative societies and individuals amounting to . 65,914,682.68 lire

These loans may be classed as follows:

1,936 loans amounting to	31,284,856.87 lire, in the form of direct loans against security
1,050 " " "	21,245,601.19 " " " " " " loans and advances
812 " " "	13,384,224.62 " " " " " " discounts of commerc. paper

3,798 loans amounting to 65,914,682.69 lire

According to regions the loans are distributed as follows:

Emilia . .	2,892 loans to	289 co-op. soc. and individuals amounting to	31,775,367.02 lire
Lombardy .	445 " "	67 " " " " " "	19,274,058.67 "
Piedmont .	425 " "	97 " " " " " "	12,530,148.99 "
Lazio . .	11 " "	2 " " " " " "	1,203,100.00 "
Liguria . .	14 " "	1 " " " " " "	507,500.00 "
Tuscany . .	6 " "	3 " " " " " "	403,000.00 "
Other regions	5 " "	7 " " " " " "	221,508.00 "

3,798 loans to 466 co-op. soc. and individuals amounting to 65,914,682.68 lire

At the end of 1919 the deposits amounted to 5,220,440 lire; the share capital to 1,624,500 lire, and the reserves to 449,125 lire.

From these figures it is easy to understand the amount of business done by the *Istituto* and its importance, especially in financing the co-operative societies for production and labour which must take a large part in the economic reconstruction of the country.

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3. THE GENERAL CONFEDERATION OF AGRICULTURE. — *Il Giornale d'Italia Agricolo*. N° 15. Rome, 25 April 1920.

This Confederation was formed in Rome on the 18th of last April by representatives of Italian agricultural associations. Over 300 associations numbering about half-a-million farmers have become affiliated to the Confederation. For about a year, under the name of National Agricultural Secretariate it acted energetically on behalf of agricultural interests, studying and fully discussing the most urgent problems of rural economics and legislation, demanding for these the attention of the Government and the country and soliciting the measures rendered necessary by the situation created by the war.

The Confederation's aim is "to co-ordinate and make effective the action of the affiliated associations for the improvement of national agriculture and production." It aims also at forming the associations into three groups of associations having a similar scope, viz technical and economic objects, credit, insurance and thrift.

Consequently it proposes: (a) to protect the interests of agriculture and to assist its development; (b) to defend the principle of the social importance of private property, believing in the maxim that the defence of individual rights is best assured when duties towards the community are most conscientiously fulfilled; (c) to further the economic and moral betterment of the workers and the improvement of the relations between the classes, championing legislation which will help to bring about such an improvement and will determine those relations on the basis of the freedom of labour and of organization; (d) to promote the study and the solution of the chief national problems relating to the social, economic and technical aspects of agriculture; (e) to bring the means of production and the organization of the sale of produce, both at home and abroad, into closer contact with the farmer; (f) to protect the agricultural classes against unjust fiscal measures; (g) to promote the wider diffusion of agricultural credit and the co-ordination of the aims and methods of the existing agricultural credit institutions; (h) to undertake the permanent representation of agricultural interests in their dealing with legislative and executive bodies so as to set forth an enlightened agrarian policy. It aims at harmonizing the action of its affiliated associations with that of the groups for the protection of agriculture formed in the Chamber of Deputies and Senate, thus stimulating the growth of a national agricultural conscience so as to ensure the most advantageous use being made of productive energies even in the political field for the direct and genuine representation of agricultural interests in the Parliament and in provincial and communal councils.

It is thus a question of agricultural action at once defensive, propagandist and political in nature: a complex and varied action which aims at co-ordinating and disciplining agricultural organizations so that they shall have more weight with the Government and Parliament.

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4. THE NATIONAL INSTITUTE OF AGRICULTURE. — *Il Giornale d'Italia Agricolo*, No. 20. Rome, 30 May 1920.

In the recent Congress of Italian farmers held in Rome (21-23 April) it was decided that the *Società degli Agricoltori italiani*, whose work we have several times brought before our readers, should be changed into an *Istituto Nazionale di Agricoltura*, the aims and duties of which would be as follows:

To promote the interests of agriculture and its allied industries; to promote the co-ordination and diffusion of agricultural studies, the allied sciences and their application, establishing direct communication between students of these matters and farmers. This bringing together of scientific men and of those who live on the land is to be one of the chief aims of the new Institute, whose object is to marshal the intellectual forces and the

technical and practical activities which influence agriculture directly or through the industries and commerce closely related to it.

The new Institute is to act as an auxiliary body for the information of the Government, other agricultural bodies and private individuals who are interested in the question, on all that bears on the protection and development of agriculture, and on the study of all questions relating to agricultural sciences, technical matters, legislation, insurance, credit and rural economics in general, and the material and moral improvement of the agricultural classes.

The Institute will make known, appraise and promote the trial of discoveries and new technical processes relating to agriculture; it will reward with prizes those who make scientific and technical discoveries useful to agriculture.

The National Institute of Agriculture will keep in touch with the International Institute of Agriculture and with other agricultural institutions and academies at home and abroad, it will set up a central agricultural-commercial information bureau which will follow the markets, organizing central exchanges for wine, oil, dried fruits, etc.; it will encourage national and district agricultural congresses and permanent and temporary agricultural shows. It will set up in Rome a permanent agricultural show, where all that is new and of interest to agriculture, whether as regards machinery, technical methods, seeds, fertilizers and methods of cultivating the land, will be collected from all over the world and exhibited.

The National Institute of Agriculture will be divided into two sections, so as to carry out its aims better: the *Scientific-technical Section* will represent the research part, to which will be called the most distinguished men on agricultural and allied sciences, and the *Propaganda and Practical Section*, which represents the executive body, whose members will be chosen from among the representatives of agricultural societies and farmers throughout Italy (1).

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5. THE NATIONAL FEDERATION OF ITALIAN RURAL BANKS. — From a recent communication to the press.

The National Federation of Italian Rural Banks (Rome) has resumed its activities which were interrupted by the war (2). The object of the Federation is to unite the rural or agricultural banks and the small agricultural co-operative societies under one representative body which will

(1) The establishment of the National Institute of Agriculture was announced in Rome on 18 September last.

(2) The Federation in question is the non-denominational Federation of Rural Banks. There is also, likewise with head-quarters in Rome, the Catholic Italian Federation of Rural Banks, which we have mentioned several times, and which on 31 December 1918 included 1,244 banks, forming 50 local federations and numbering 151,617 members.

look after their interests. The Federation has promoted its aims in various ways, helping to improve the various regional laws on agricultural credit, stimulating the formation of agricultural banks and societies in all parts of Italy, rendering technical assistance by means of a well organized service for inspection and consultation, unifying and improving the accountancy system, carrying on active propaganda for co-operative principles in its paper, *La Cooperazione Rurale*. By the end of 1914 about 400 rural societies belonged to the Federation and received suggestions, encouragement and help from it. One of the most useful steps taken by the Federation was the formation of the *Banca Nazionale delle Casse Rurali Italiane* which during the five years that it has been in existence has shown a constant increase in the loans granted every year, as follows (1): 948,829.28 lire in 1915; 2,690,410.73 lire in 1916; 3,096,067.08 lire in 1917; 4,914,493.02 lire in 1918; 7,265,822.23 lire, in 1919; a total of 18,915,622.34 lire. The deposits likewise increased so that on 31 December 1919 they amounted to 1,843,865 lire. This figure shows clearly the confidence which the Bank has inspired and the promptness with which it pays all calls on it by societies and private depositors.

PERU

LAND TENURE AND THE POSSIBILITY OF ORGANISING RURAL CO-OPERATION.

OLIVAS (Justiniano Vidal) · Apuntes. Lima, 1918

We have no record that there has ever been in any part of Peru an agricultural co-operative association, on the lines of those of Europe and North and South America; nevertheless there is no lack of institutions organized with a special view to agricultural co-operation. For instance the "ayllu" (lineage), the origins of which go back to prehistoric times, is based on the family group and has through its evolution taken on the aspect and functions of an agricultural co-operative clan. It must be understood that they have not got in the least degree the mechanism or technical organization of European co-operative societies, but we mention this phenomenon as showing the possibility of introducing these associations into Peru.

In Peru, which is an eminently agricultural country, the cultivation of the land was fully developed during the Inca rule. This was chiefly due to the colossal canals excavated by the people. During the Spanish occupation, however, the cultivation of the land was very much neglected and in many places entirely prohibited owing to the working of the minerals. When the country reconquered its independence the land was again energetically cultivated. There is no record, however, that any at-

(1) See: *Banca Nazionale delle Casse Rurali Italiane: Resoconto per il 1919*. — Report of the Committee of Management and of the Auditors. Rome, 1920.

tempts were made to introduce co-operative systems of which indeed the mass of the population has no conception into Peru; we are thus led to enquire whether the geographical conditions of the country and its social and economic conditions are not such as to prevent the adoption of this modern system which is so helpful to the development of agriculture.

This problem is very difficult to resolve owing to the scarcity, or rather absolute lack, of precise data on which to work. We can, however, definitely state that the geographical conditions of Peru are not the best suited to the organization and development of agricultural co-operation: the distribution of fertile lands is very unequal owing to the proximity of the sea to the mountains, and also owing to the vast extent and density of the forests. On the other hand there is no lack of vast table-lands admirably suited to cultivation and, in general, there is plenty of irrigation. It is true that Peru is very short of important high roads and suitable means of transport, but there is no reason why the former should not be built and the latter organized; if only the Government would take the initiative it would receive ample support from the rural population.

From the social and economic side also, it must be admitted that the present deficiencies are not such as a decisive agrarian policy could not overcome. When we consider the most important factor in civilization, the density of population, we must remember that although four inhabitants per square kilometre is not a large number, still it is larger than that of Argentina and Brazil, both of which are undoubtedly more advanced. Another circumstance, which should be noticed, is that half the population, taking into consideration the "Indios," is exclusively occupied in agriculture. Nor would it be a difficult undertaking to attract an important flow of immigration to Peru.

There is no doubt that the great diversity of races, the uncertain distinction of social classes, the multiplicity of dialects and other circumstances constitute serious difficulties against the development of civilization and hamper progress; but these difficulties, far from being found all over the country, are localized only in some parts of it. Contrary to what is the case in other countries, the diversity of races and social classes, especially in the rural parts, has never caused serious antagonism amongst the different groups; the various dialects spoken in the sierras make it very difficult for the inhabitants of the different localities to understand one another. Compulsory elementary education has already produced a notable result: that although the official language is not much spoken it is perfectly understood by the "Indios." It must be noted, that it has been proved that the "Indios" are capable of progress and it is thought that agricultural co-operative association would help to accelerate the evolutionary process.

Ignorance and superstition are a great bar to progress, not only among the "Indios," but also among the greater part of the rural population of Peru, but there is no country in which one does not come across this difficulty, and everywhere it has been overcome.

On examining the present agrarian organization of Peru, we find, in

spite of the lack of documents and of statistical data, that there exists a double regime of land-tenure or ownership; the one can be readily distinguished from the other by its historical origin and its social function. On the one hand we have the regime of private property which was acquired, according to the Roman system, by conquest and which was afterwards recognized by the colony and then by the republic; such a property is called *chacara* if small, *quinta* if medium-sized and *hacienda* if large. On the other hand there is the system of the Incas, which may be described as "communal ownership." The historical origin of this form of land tenure is lost in the mists of time; it was this which formed the basis of the marvellous Inca Empire and having survived the Spanish dominion and regained independence, it is still in force in the regions of the Andes and its rules are observed over a considerable extent of Peruvian territory.

These conditions would make the introduction and development of co-operative principles easier here than in some other countries, since these principles would find congenial soil in an organization based on communistic methods. There would be much greater difficulty in applying co-operation in the districts where private property is the rule, specially taking into consideration the jealously conservative feeling of primitive peoples.

In some districts, especially in the vicinity of the cities, in the fertile valleys of the Sierra and on the banks of the rivers, the landowner has ousted the community, regarding the land as his own property, but leaving the peasants in charge to cultivate it; these are considered by the landowner as his slaves who can be forced to do the hardest sort of work.

In other districts, where the landowner has got all the land into his hands and is able to dispose of it as he likes, the aborigines have become a species of "metayer" or tenant farmer, but they are always under the thumb of the landowner, to whom they pay either a fixed sum of money, or a certain quantity of produce, or personal service. The entire absence of statistical data makes it impossible to determine, even approximately, the amount of land subject to these different systems of land-tenure; it is likewise impossible to know the numerical importance of the different classes or the number of people living under the different regimes; we can, however, say on general lines that private property preponderates in Peru, but that there is also a large extent of communal holdings.

Under these circumstances it is easy to understand what difficulties would be encountered in attempting to introduce co-operative systems of agriculture into Peru, but somewhat similar, if not identical, difficulties have been overcome in other countries, and it cannot be said that conditions in Peru are worse than they were elsewhere. It is certainly absolutely necessary that the question of land distribution in Peru should be carefully studied and that wise legislation should be passed to settle it; but it is also evident that even under present conditions some useful attempts to introduce co-operative systems might be made. The present Peruvian laws are not opposed to this since they grant full liberty of association and do not interfere with any initiative in that direction.

In conclusion, we may say, that although the present conditions in Peru are not actually favourable to the introduction of co-operative institutions in all branches of agriculture, we do not find conditions which would negative all initiative towards the adoption of this important means for insuring economic well-being and for promoting the spread of civilization.

SPAIN.

1. THE CATALONIAN AGRICULTURAL INSTITUTE OF S. ISIDORO. — Reglamento, Memorias y Anuarios del Instituto Agrícola Catalán de San Isidro.

The Catalonian Agricultural Institute of San Isidro, founded in Barcelona in 1851, is an association of country land owners whose principal aim is to develop and perfect all branches of agriculture and to protect the interests of the agricultural classes. All members, whether resident, corresponding, honorary, collaborating or auxiliary, have equal rights to enjoy the advantages which the association can give them.

Apart from the Managing Committee, the Managing Council and the Technical Committee, which sit at Barcelona, there is a Permanent Sub-Committee sitting at Madrid, and Sub-Committees in various other localities. The Managing Committee is, of course, the most important; it deals with the organization and administration of the services; it was, however, considered desirable to add to the Managing Committee a Managing Council whose functions are purely consultative.

The Technical Committee studies scientific developments in connection with agriculture and the plans for action to be taken by the Institute. The Permanent Sub-Committee co-operates in the realization of the Institute's aims. The local Sub-Committees, organized according to rules laid down by the Managing Committee, act as the "long arm" of the Committee in the respective centres, and have certain special duties which they can carry out on their own initiative, provided that they keep within the limits of the general intent of the Institute.

It would be difficult to give a detailed account of the action taken and the results obtained by this important society since its formation. The Institute has intervened to regulate the conditions and facilitate the conclusion of innumerable agricultural agreements for renting land, or hiring labour, for sales, purchases or loans, for insurance against hail or accidents in agricultural work. But the Institute has, with varying fortune, initiated and carried through much more important undertakings. We refer to the political action relative to agriculture in which the Institute has always taken part with great fervour. It is to the Institute that are due the promulgation of important laws, the carrying out of road-making, transport undertakings and re-afforestation, and the establishment of central markets and institutions of an economic and social order.

The Institute, whilst occupied with the consideration of so many

and so important problems, has not neglected to take other steps, less direct, but not less useful to the development of agriculture, such as the organization of congresses, lectures and exhibitions; nor such pleasant ones as excursions, country fêtes and instructional expeditions. The Institute has given particular attention to organizing agricultural instruction, setting up offices for analysis and consultation, and to insuring supplies of feeding-stuffs, seeds and fertilizers.

2. THE LEGAL STATUS OF THE SECTIONS FOR PURCHASE AND SALE OF THE AGRICULTURAL SYNDICATES. — *Archivo Social*, supplement to the *Revista Social*, II Series, 1st Year, No. 2. Madrid, April 1920.

A Royal Decree was promulgated last September, on the suggestion of the National Catholic Agricultural Confederation, which compelled the Minister of Finance to sanction the rules of agricultural syndicates which had sections for purchase and sale in common even though they did not bear the special title of "distributive co-operative societies."

To explain the importance of this recent order, we must note that distributive co-operative societies pure and simple do not, under Spanish law, benefit by the fiscal advantages and exemptions from taxation which were granted to agricultural syndicates by the Law of 28 January 1906. Since these, on the strength of these concessions, were organizing sections for purchase and sale without calling them distributive co-operative societies, the Government, under the impression that this was done so as to evade the fiscal laws, was deliberating whether to refuse to sanction the rules, so as to prevent a loss to the revenue.

The National Catholic Agricultural Confederation pointed out that, by art. 1 of the Law of 28 January 1906, "legally constituted associations which purpose, among other aims, the purchase and sale of implements, agricultural machinery, stud animals, fertilizers, seeds and other agricultural requisites, shall be considered as agricultural syndicates." The Confederation further pointed out that the Government by not sanctioning the rules of the sections for purchase and sale of agricultural associations, and trying as regards fiscal matters, to make them come under the laws which regulate distributive co-operative societies pure and simple, contravened the spirit and the letter of the law of 28 January 1906 and entirely annulled the object of the law. The Government doubtless made this mistake owing to the obscure and defective wording of the law, so that this recent decree very opportunely establishes definitely the right of agricultural syndicates to set up sections for purchase and sale and does away with all doubt on the position of such sections.

Part II: Insurance and Thrift

SPAIN.

THE MUTUAL HAIL INSURANCE SOCIETY OF THE FARMERS' ASSOCIATION.

SOURCES (UNOFFICIAL):

- CAJA DE SEGUROS MUTUOS CONTRA EL PEDRISCO: REGLAMENTO-PÓLIZA. Published by the Farmers' Association of Spain. Madrid, 1916.
- DE EZA (Vizconde): Seguros agrícolas contra el pedrisco. *Boletín de la Asociación de Agricultores de España*, No. 96. Madrid, May 1917.
- CAJAS DE SEGUROS MUTUOS CONTRA EL PEDRISCO Y ACCIDENTES DEL TRABAJO EN LA AGRICULTURA: INSTRUCCIONES GENERALES QUE SE CIRCULAN A SUS DELEGACIONES. Published by the Farmers' Association of Spain. Madrid, 1917.
- CAJA DE SEGUROS MUTUOS CONTRA EL PEDRISCO. *Boletín de la Asociación de Labradores de Zaragoza*. Saragossa, 15 July 1917.
- MEMORIA DE LA CAJA DE SEGUROS MUTUOS CONTRA EL PEDRISCO EN SU PRIMER EJERCICIO DEL AÑO 1917. Madrid, 1918.
- MEMORIA DEL SEGUNDO EJERCICIO SOCIAL DE NUESTRA CAJA DE SEGUROS MUTUOS CONTRA EL PEDRISCO (AÑO 1918). *Boletín de la Asociación de los Agricultores de España*, No. 117. Madrid, February 1919.
- CAJA DE SEGUROS MUTUOS CONTRA EL PEDRISCO CREADA POR LA ASOCIACIÓN DE LOS AGRICULTORES DE ESPAÑA. *Boletín de la Asociación de los Agricultores de España*, No. 117. Madrid, February 1919.
- MEMORIA DE NUESTRA CAJA DE SEGUROS MUTUOS CONTRA EL PEDRISCO EN SU TERCER EJERCICIO SOCIAL, AÑO 1919. *Boletín de la Asociación de los Agricultores de España*, No. 130. Madrid, March 1920.

For the benefit of its members and the members of its affiliated societies, the Farmers' Association decided in 1916 to form a Mutual Hail Insurance Society (*Caja de Seguros mutuos contra el pedrisco*). The Society was registered on 4 April 1917.

The insurance which it offers is based on the payment by the policyholders of a provisional premium, calculated according to the nature of the crop and to the district in which it is situated.

The crops insured are divided into five classes according to the greater or less danger of damage by hail to which they are exposed. The five classes are as follows: (1) Roots and tubers; (2) Winter cereals; (3) Summer

cereals, farinaceous vegetables, industrial plants and spring fruits ; (4) Summer and autumn fruits, garden produce, and forage plants ; (5) Vines and olives.

According to the frequency with which hail storms occur in the different districts, the so-called "topographical risks" have been divided into eleven classes.

The following table shows the provisional premiums for each class of crops and for each class of "topographical risk."

TABLE I. — *Scale of Provisional Premiums.*

Topographical risk —	Crops insured				
	1st Class	2nd Class	3rd Class	4th Class	5th Class
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1st Class	0.64	0.86	1.08	1.30	1.52
2nd Class	0.76	1.01	1.26	1.51	1.76
3rd Class	0.86	1.15	1.44	1.73	2.02
4th Class	0.98	1.30	1.62	1.94	2.26
5th Class	1.08	1.44	1.80	2.16	2.52
6th Class	1.18	1.58	1.98	2.38	2.78
7th Class	1.30	1.73	2.16	2.59	3.02
8th Class	1.40	1.87	2.34	2.81	3.28
9th Class	1.52	2.02	2.52	3.02	3.52
10th Class	1.62	2.16	2.70	3.24	3.78
11th Class	1.72	2.30	2.88	3.46	4.04

If in any one year the value of the crops insured is less than 1,000,000 pesetas, no insurance will be effected. The premiums will be carried forward to the following year and interest at the rate of 3 per cent. will be paid upon them.

The insurance policies must be taken out for a period of five years and the provisional premiums are paid annually in advance. Besides the provisional premium, the policy-holder pays an additional premium equal to 10 per cent. of the provisional premium. This goes to form what is known as the "period reserves."

Premiums are payable between 1 March and 10 April in each year. Crops other than vines are only insured as from 15 April and vines as from 1 May.

Where damage occurs, the amount is assessed, if possible, by agreement between the policy-holder and the Society. Failing this each party appoints a valuer. If the two valuers cannot agree, they appoint a third and the assessment is made by a majority of votes. In making the assessment account must be taken of any circumstances which reduce the loss, such as the salving of parts of the crop or the saving of part of the expense which would have been incurred in gathering it.

No compensation is payable if the damages are less than one twentieth part of the insured value. Nor is any compensation paid for damage which occurs to crops after they have been cut or gathered. If, again, it is proved that the policy-holder did not insure the whole of the crops of the same nature as the damaged crop which were grown on the same farm, he forfeits all right to compensation. Should the amount of the damage be higher than the insured value stated in the policy, the latter sum is taken as the basis of compensation, the policy-holder being considered insured only up to this amount.

The first charge on the funds of the Society are the management expenses and to meet these a sum equal to 20 % of the provisional premiums of the year is set aside.

In November the payment of compensation and the annual settlement take place. For the payment of compensation all classes of risks are bulked together. The inequalities between the different risks are held to have been allowed for in the difference between the respective premiums.

If possible the assessed damages are paid in full. The provisional premiums of the year (reduced by the 20 % set aside for management expenses) are first drawn upon, the amount of compensation payable being distributed proportionately among the policy-holders. If the compensation is less than the total provisional premiums of the year (reduced by 20 %) the balance which remains of each policy-holder's premium after deduction of the share of the compensation is carried forward to his credit, being added to the premiums paid by him, without however reducing the amount of the premium payable.

If the provisional premiums are insufficient to pay the compensation in full, the additional premiums (which form the "period reserve") of the year are next drawn upon. The distribution is again proportionate and balances are carried forward.

Should the "period reserve" of the year be insufficient, recourse is had to the balances of provisional premiums accumulated in previous years and to the "period reserves" of previous years. In this case, however, a distinction is made between the policy-holders according to the five year period for which they are insured. The balances and "period reserves" accumulated out of the premiums paid by policy-holders insured for a particular five-year period can only be drawn upon to complete the compensation payable to policy-holders belonging to the same group who have sustained losses.

If the accumulated balances and "period reserves" do not suffice to pay the full compensation, recourse is had to the "general reserve." This is formed by the balances of the "period reserves" remaining over at the end of each five year period, and by subsidies and gifts received by the Insurance Society. In any one year, however, only one fourth of the existing general reserve can be applied to the payment of compensation.

If the available funds are inadequate to pay the compensation in full, the compensation is proportionately reduced. In no case is a supplementary levy made. However great may be the losses incurred, the

policy-holders are not required to pay more than the provisional and additional premiums.

At the end of his five-year period, a policy-holder may withdraw the accumulated balances of the provisional premiums which remain to his credit, or he may apply them to the payment of premiums for a new insurance. The "period reserves," on the other hand, pass to the "general reserve."

In 1917, the first year in which the Society was at work, 63 insurance policies were taken out, the total value insured being 1,092,147.82 pesetas. Fourteen policy-holders sustained losses amounting in all to 11,211.14 pesetas.

The provisional premiums amounted to 19,711.16. Deducting 20 % (3,942.06 pesetas) for management expenses, there remained 15,779.10 pesetas of the provisional premiums available for paying compensation. This was more than the damages, which were accordingly paid in full, leaving 3,749.99 pesetas to be carried forward as accumulated balances of provisional premiums. The additional premiums amounted to 1,971.03 pesetas, and this sum was carried forward untouched as "period reserve."

In 1918, the number of policies taken out was 622. Adding this to the 63 taken out in 1917, there were 685 policies in force in 1918. The total value insured during the year was 5,316,108.42 pesetas. The risks were distributed over 22 different provinces of Spain, thus fulfilling one of the fundamental principles of this kind of insurance, namely, the diffusion of the risks over wide areas.

The number of policy-holders who suffered losses was 158. The total amount of the damages assessed was 100,340.90 pesetas. But the total amount of the provisional premiums of the year was only 111,193.09 pesetas. Deducting 20 % for management expenses, the part of the provisional premiums of the year available for paying compensation was 80,415.38 pesetas. The whole of this was absorbed. So also was the whole of the additional premiums for the year, amounting to 10,051.86 pesetas. This still left 9,873.66 pesetas unpaid. For the policy-holders insured for the five-year period 1918-1922, there were no further funds to draw upon, but amongst those who had suffered losses were seven policy-holders insured for the period 1917-1921 and to complete the payment of compensation to these a sum of 687.35 pesetas was drawn from the balances of provisional premiums brought forward from the previous year. The policy-holders insured for the period 1917-1921 who sustained losses thus received compensation in full, while those insured for the period 1918-1922 received compensation to the extent of 92.1801 per cent. of the assessed damages. The total amount of compensation paid was 93,190.72 pesetas.

No balances of provisional premiums or "period reserve" were left to be carried forward in respect of the 1918-1922 policy holders, but balances of provisional premiums amounting to 3,062.64 pesetas remained to be carried forward in favour of the 1917-1921 policy-holders while the "period reserve" of 19,711.16 pesetas accumulated in 1917 was carried forward undiminished.

In 1919 the number of new policies taken out was 1,141. The earlier policies which continued in force numbered 685 and one policy, which had been cancelled, was revived by agreement with the Committee. This made 1,779 policies in force during the year.

The total value insured was 11,216,574.43 pesetas. The provisional premiums amounted to 204,044.53 pesetas. Deducting 20 % for management expenses this left 163,235.78 pesetas as the part of the provisional premiums available for the payment of compensation. The additional premiums amounted to 20,404.38 pesetas.

The number of policy-holders who sustained loss was 399, and the total damages assessed amounted to 164,222.77 pesetas. This was slightly larger than the available part of the provisional premiums, but a sum of 4,469.74 pesetas had been received as interest on the funds of the Society and this was utilized to help to pay the compensation. The provisional premiums were drawn upon to the extent of 159,753.03 pesetas, which sufficed to pay the compensation in full. The balance of 3,482.72 pesetas was carried forward. The "period reserve" of the year, 20,404.38 pesetas, was carried forward untouched, as also were the balances and the "period reserve" previously accumulated.

The following table shows, for each of the three years, the relations (expressed as percentages) between the premiums, the capital insured, the damages assessed and the compensation paid.

TABLE II. — *Relations between Premiums, Capital Insured, Damages Assessed and Compensation Paid.*

Year	Premiums to capital insured	Damages assessed to premiums	Compensation paid to premiums	Damages assessed to capital insured	Compensation paid to capital insured
—	%	%	%	%	%
1917	1.99	56.42	56.42	1.12	1.12
1918	2.09	90.24	83.81	1.86	1.75
1919	2.01	72.67	72.67	1.46	1.46

As the total premiums are equal to $\frac{11}{10}$ ths of the provisional premiums and the management expenses are equal to $\frac{2}{10}$ ths of the provisional premiums, it follows that $\frac{9}{11}$ ths (or 81.81 per cent.) of the total premiums are available for the payment of compensation. If the damages assessed are less than 81.81 per cent. of the total premiums, they can be paid in full without drawing upon funds brought forward from previous years. This occurred in 1917 and 1919, but not in 1918; in that year the damages amounted to 90.24 per cent. of the premiums, but it was only possible, by drawing upon the funds brought forward, to pay compensation amounting to 83.81 per cent. of the premiums.

Though the experience of three years can hardly be regarded as conclusive, it would seem that the scale of premiums has been adjusted to the risks fairly accurately.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE
AND THIRIFT IN VARIOUS COUNTRIES.

FRANCE.

THE "MUTUELLE-~~LABOUR~~" INSURANCE SOCIETY. — *La main-d'œuvre agricole*.
Paris, July 1920,

Dr. Delucq, general secretary of the Agricultural Syndicate of Vic-Fezenac (Gers), gives in the June issue of the Bulletin of this syndicate interesting information on a mutual insurance society against mortality amongst live stock, accidents during work, hail and fire, in which instead of paying premiums, the members do a certain amount of work under the following conditions:

"The Society rents parcels of lands in different places," says Dr. Delucq, "so that the members may work them without needing to move far. It is not difficult to procure at a low rent detached parcels of land, often left uncultivated by their owners, to whose interest it is only to work the land near to their homes.

"On these pieces of land, rented for a term of years, the Society installs the four course rotation of crops: root crops, wheat, forage crops, oats. The Society determines the number of cubic metres of farmyard-manure which each member must provide at the beginning of the rotation, that is to say the break reserved for root crops, the work to be done in the case of each crop, the number and depth of the ploughings, harrowings and hoeings, and the times at which such work is to be done, leaving the cultivator a certain latitude in carrying it out. Seed and fertilizers (other than farmyard-manure) are provided by the Society, to whose interest it will be to procure choice seeds.

"Each member engages to cultivate the amount of land which he considers sufficient so that the presumed value of the harvest may suffice to pay the premiums guaranteeing him against one or more risks at his choice, but so that the crops may be changed in the succeeding seasons, each parcel of land is divided between the four periods of rotation, and each year he manures a quarter.

"The crops on all these parcels of land are sold standing by public auction for the benefit of the Society; they are often bought in by those who cultivated them. By selling the crops at auction before they are harvested, the Society avoids all need to supervise the yield."

The insurance proper is carried out as follows with this money. There are two methods to be considered: either the Society can itself pay the compensation out of the money thus obtained, or else it can pay over the premiums of its members to an already established insurance company or society. Dr. Delucq contemplates the latter method:

"The money gained serves in the first place to cover the working expenses of the Society, the supervision of work and the insurance of the cultivated land against hail, and, after a deduction for the reserve funds, the balance is used to pay insurance premiums on behalf of the members up to a sum, settled in advance, for each section under cultivation. This estimate will vary from year to year according to fluctuations in prices.

"Each member is free to divide his insurance money as he wishes (hail, fire, accidents during work, mortality among live stock, mutual aid) and to choose the society in which he wishes to insure.

"If the receipts exceed the total of the insurance premiums that the Society has undertaken to pay, the balance goes to the reserve fund. If, on the other hand, owing to bad crops, or to a fall in prices, the receipts are less than the sum of the insurance premiums, and if the reserve fund be not sufficient to cover the deficit, the payment of premiums is made in proportion to the land cultivated by the members."

In these "mutuelle-labour" societies the farmer gets full security by means of a little extra work, the value of which is increased by the plus-value resulting from cultivation. Furthermore the societies can get better terms from the insurance companies than a private individual could, by bringing them a fairly large amount of business. Their members can profit to the extent of the fairly high commissions paid to agents. It will be to the interest of the societies to affiliate themselves to the mutual insurance societies organized by the big agricultural groups, which, in spite of the reduction in premiums, offer in their large reserve funds full security to the farmers.

Whilst admitting that large land-owners, owing to the difficulty they have in getting labour, own at times more land than they can conveniently cultivate, the same cannot be said of small farmers, who often have free days and their stock not working. It is these days which the "mutuelle labour" societies enable them to employ profitably.

Finally these mutual societies, by cultivating the overlooked parcels of land of the commune, will increase the general total of the harvests and in consequence the flow of money, which always benefits a community.

GERMANY.

THE HAIL, INSURANCE COMPANIES IN 1919. — *Sächsische Zeitschrift für das Versicherungswesen*, No 7. Leipzig, 1 April 1920.

The year 1919 was in Germany, like the preceding, generally favourable to insurance against hail. Of the four joint-stock hail-insurance companies existing in Germany of which we have been able to follow the progress in detail in this Review up to 1915 (1), three, namely the *Berliner*, the

(1) See the article on "The Development of Insurance against Hail" in our issues of January, February, March and April 1918.

Kölnische and the *Magdeburger* show a slight retrogression, while the fourth, the *Union Allgemeine Deutsche Hagel-Versicherungs-Gesellschaft*, succeeded in increasing the sum insured, notwithstanding the exceptional condition of the country, as will be seen from the following table:

TABLE I. — *Sums Insured in 1919.*

Companies	Sums insured	Increase (+) or diminution (—) compared with the preceding year
	marks	marks
Berliner. . .	245,079,727	— 1,492,263
Kölnische . .	300,670,530	— 1,338,346
Magdeburger	340,129,982	— 2,373,454
Union. . . .	299,642,636	+ 1,320,322
Total . . .	1,185,522,875	— 3,883,741

The total amount of the premiums received by all but one of the companies showed an increase compared with the previous year, as is shown in the following table:

TABLE II. — *Total Amount of Premiums.*

Companies	1919	1918	Increase (+) or diminution (—) in 1919 as compared with 1918
	marks	marks	marks
Berliner.	3,006,513.81	2,998,883.53	+ 7,630.28
Kölnische	3,394,006.60	3,391,192.49	+ 2,814.11
Magdeburger	4,223,687.18	4,232,479.25	— 8,792.07
Union	3,332,237.94	3,275,189.84	+ 57,048.10
Total . . .	13,956,445.53	13,897,745.11	+ 58,700.42

A considerable increase is also shown in the premiums retained by the companies to cover risks directly insured (Table III, page 706).

In the course of the spring season, at first cold but dry, damages caused were slight; only at the beginning of July was there hail, and then of a local character, but heavy, and causing damage in certain parts, diminishing, however, in August, and ceasing altogether in September and October,

TABLE III. — *Premiums Retained to Cover Risks Directly Insured.*

Companies	1919	1918	Increase (+) or diminution (—) in 1919 as compared with 1918
	marks	marks	marks
Berliner	2,184,245.87	2,162,184.27	+ 22,061.60
Kölnische	3,066,287.53	3,067,779.87	— 1,492.34
Magdeburger	3,992,670.11	4,005,636.70	— 12,966.59
Union	3,327,156.38	3,269,121.14	+ 58,035.24
Total . . .	12,570,359.89	12,504,721.98	+ 65,637.91

Harvest operations were much delayed by cold and rainy weather which was prevalent during July and August, thus protracting the companies' risk. The first damages occurred on 15 April, the last on 17 October. It was remarkable that districts, which for many years had been spared by hail, were this year repeatedly struck, and in parts the crops were completely destroyed, contrary to any forecast which could have been drawn from statistics. The provinces of Hanover, Posen, Pomerania, East and West Prussia were seriously damaged; Württemberg also required a considerable amount of compensation.

The total compensation paid without taking into account the expenses was as follows:

TABLE IV. — *Total Compensation Paid.*

Companies	1919	1918	Increase (+) or diminution (—) in 1919 as compared with 1918
	marks	marks	marks
Berliner	1,037,495.49	1,092,493.79	— 54,998.30
Kölnische	1,113,607.35	1,250,667.56	— 137,060.21
Magdeburger	1,686,495.35	1,527,851.81	+ 158,643.54
Union	516,849.84	961,885.25	— 445,035.41
Total . . .	4,354,448.03	4,832,898.41	— 478,450.38

The compensation paid by the companies themselves was as follows.

TABLE V. — *Compensation Paid in respect of Risks Directly Covered.*

Companies	1918		Increase (+) or diminution (—) in 1919 as compared with 1918	
	marks	marks	marks	
Berliner. . .	766,315.47	748,855 60	+	17,459 87
Kolnische . .	952,937 36	1,076,817 26	—	123,879.90
Magdeburger.	1,583,387 47	1,465,851 40	+	117,536 07
Union . . .	515,658.72	461,289 66	—	445,630 94
Total .	3,818,299.02	4,252,813 92	—	434,514 90

The management expenses were largely increased in consequence of the considerable increase in the salaries of the staff, and also because of the increase of other general expenses. The difficulty of finding means of transport raised the cost of estimating the damage done. The management expenses were as follows :

TABLE VI. — *Management Expenses.*

Companies	Commissions and other payments to agents	Other management expenses	Taxes and duties	Total
	marks	marks	marks	marks
Berliner	222,671.65	241,344 10	273,571 33	737,587.08
Kolnische.	293,356 11	300,774 34	313,963 40	908,093.85
Magdeburger	521,992.00	502,121 63	271,315 87	1,295,459.50
Union	275,747.51	376,824.12	517,588 40	1,170,160.03
Total	1,313,767.27	1,421,061 19	1,376,469.00	4,111,300.76

The comparison between the interest received and the profits realized owing to the rise in the value of securities on the one hand, and on the other hand, the writing off of assets which became necessary in consequence of the depreciation in value of State and private securities show discouraging results. For the four companies this depreciation amounted to more than 2 ½ millions of marks, which therefore absorbed not only the total income derived from interest, rise in value of securities, etc., which amounted to more than 1 ½ million marks, but also a sum of 945,273.99

marks drawn from the profit on the year's working. Thus, naturally, the financial results were very modest, as will be seen by the following table.

TABLE VII. — *Financial Results for the Years.*

Companies	Interest received on capital invested	Rise in value of securities	Depreciation in value of securities
	marks	marks	marks
Berliner	370,640 21	4 900 00	597,128 10
Kölnische	291,718 01	6,000.00	710,765.00
Magdeburger	391,992.47	—	677,085 00
Union	532,014 00	98,454 25	655,714.86
Total . . .	1,586,364 72	109,354 25	2,640,992 96

As to the capital accounts of the companies we have the following particulars:

TABLE VIII — *Capital Account of the Companies.*

Companies	Cash and current accounts in the banks	Real property	Mortgages	Securities
	marks	marks	marks	marks
Berliner	136,176 58	100,000 00	—	6,835,175 00
Kölnische	515,779 48	183,600 00	—	5,248,870 60
Magdeburger	124,573 12	—	635,000.00	6,817,078 00
Union	295,773 21	125,000 00	771,300.00	9,955,566 89
Total . . .	1,072,302 39	408,600 00	1,406,300 00	28,856,690 49

Notwithstanding the unfavourable circumstances already mentioned, there remained to the companies a sufficient profit, distributed as shown in Table IX (page 709).

The guarantee funds of the four companies amount now to 44,044,682.92 marks, and have therefore reached an amount sufficient for every eventuality, even for hail insurance, exposed in the highest degree to unforeseen risks.

TABLE IX. — *Distribution of Profits.*

Companies	Profits	To the shareholders	To the reserves	Otherwise allocated
	marks	marks	marks	marks
Berliner	524,809.24	200,000.00	89,542.58	235,269.66
Kölnische	879,272.57	420,000.00	346,740.92	112,531.65
Magdeburger	560,040.05	380,000.00	149,051.04	30,989.01
Union ,	1,557,555.15	903,420.00	528,763.85	125,371.30
Total . . .	3,521,677.01	1,903,420.00	1,114,098.39	504,158.62

TABLE X. — *Guarantee Funds in 1920.*

Companies	Share capital	Including paid up capital	Reserve capital	Mathematical reserves
	marks	marks	marks	marks
Berliner	3,000,000.00	1,650,000.00	5,064,542.58	1,195.59
Kölnische	9,000,000.00	1,800,000.00	3,484,508.54	—
Magdeburger	6,000,000.00	3,000,000.00	4,145,328.36	—
Union	7,528,500.00	4,316,340.00	5,820,613.85	—
Total . . .	25,528,500.00	10,766,340.00	18,517,993.33	1,195.59

ITALY.

1. THE PROVINCIAL INSTITUTIONS FOR SOCIAL INSURANCE. — Decreto-legge 21 aprile 1919, n. 603, concernente l'assicurazione obbligatoria contro la invalidità e la vecchiaia. — Decreto 12 gennaio 1920 del Ministro dell'industria, commercio e lavoro che stabilisce la sede e la circoscrizione degli Istituti di previdenza sociale agli effetti della citata assicurazione.

The head quarters and working districts of the Provincial Institutions for Social Insurance (*Istituti provinciali di previdenza sociale*) established by the Decree-Law of 21 April 1919, No. 603, on compulsory insurance against invalidity and old-age (1) were fixed by the Decree of 12

(1) See the article on this subject in our issue of November-December 1919,

January 1920 of the Ministry of Industry, Commerce and Labour. Now that the 37 institutions established by the said ministerial decree are being set up, we consider it useful to examine their origin and scope. In the intention of the legislature, they are to act not only as organs for the application of compulsory insurance, but also for the supervision and the co-ordination of all forms of social insurance.

By article 20 of the Decree-Law of 21 April 1919, such an institution should, as a general rule, be set up for each province. At present only 37 have been provided for, so that some of them deal with more than one province, in accordance with the last paragraph of the above mentioned article which enacts that several provinces may be dealt with by one institution, while, on the other hand, two or more institutions may be set up in one province.

Each institution is governed by a Committee of Management, one third of the members of which are nominated by the Minister, while one third are representatives of the employers of labour, and one third are representatives of the persons insured, all chosen by the respective principal organizations working in the district assigned to the institution. In case there are no such organizations or when, in the opinion of the Minister, they are not sufficiently representative of the parties in question to elect representatives, the selection of these shall be made by the Minister from a list supplied by the Permanent Labour Committee. This list shall contain twice as many names as there are representatives to be selected. With the object of getting to work as soon as possible, the 37 institutions mentioned are to be managed by provisional committees nominated by decrees of the Minister of Industry, Commerce and Labour and composed of representatives of the persons insured and of the employers of labour, selected from lists compiled by the Permanent Labour Committee.

The Institutions are at present only assigned specific duties dealing with insurance against invalidity and old age ; these duties are set out in the above mentioned decree (article 21). It is easy to see from the nature of the duties already assigned to them that these committees would be well fitted to extend their activities to all branches of social insurance.

These Institutions must, in the first place, supervise the application of the above forms of insurance in their own districts. They must, further, establish the rules for the payment of the insurance contributions and see that the payments are made in those cases where the stamp system has not been adopted. They must get into touch with mutual aid societies, with kindred provident societies and with workers' and manufacturers' organizations for the prevention and cure of invalidity.

Another very important duty is that of assembling and investigating applications for pensions and inquiring into cases of invalidity according to the instructions of the National Social Insurance Fund (*Cassa nazionale per le assicurazioni sociali*).

A field of action which it is hoped may give good results is also assigned to the Provincial Institutions in promoting voluntary insurance and thrift in general. The Decree of 21 April 1919 proposes for this

purpose the establishment of three voluntary insurance societies: one for those who, by their position or economic conditions, are not liable to compulsory insurance; another for those who, being no longer compelled to insure, still wish to keep up voluntary payments; and a third for those who wish to increase the pension to which their compulsory payments entitle them.

The Provincial Institutions must, finally, give their opinion on the amount of insurance contribution as compared with benefits paid and on the adoption of average wages tables. They must also perform all the other tasks allotted to them by the *Cassa Nazionale per le assicurazioni sociali* (1) of which we have already spoken in our issue of November-December 1919.

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2. THE NEW ORGANIZATION OF THE "ISTITUTO NAZIONALE PER LA MUTUALITÀ AGRARIA." — *Cooperazione e Mutualità Agraria*. Monthly Supplement to *I Campi*. Rome, July 1910.

The work of propaganda and assistance for the mutual insurance movement in country districts is carried on in Italy by the *Istituto Nazionale per la Mutualità Agraria*. To this Institution are due the most beneficial and varied measures taken in this small but highly important branch of insurance work, measures to which we have already called attention (2). As regards the regulations for carrying out the Law of 2 September 1919, No 1959, on agricultural co-operative societies (see our July issue) the Council of State has recently approved the new rules of the Institute, of which we give a resumé.

The *Istituto Nazionale per la Mutualità Agraria* incorporated by the Decree of 26 September 1915, No. 1525, has its headquarters at Rome. It aims at "promoting, diffusing and assisting throughout the rural communes, associations on a mutual basis formed for purposes of thrift." It has the further object of co-ordinating these institutions with the mutual and co-operative societies for production, credit, distribution, and mutual aid.

(1) By the Royal Decree of 30 May 1920, No 772, published in the *Gazzetta Ufficiale del Regno*, 23 June 1920, N. 147, the new rules of the *Cassa Nazionale per le Assicurazioni Sociali*, which was set up in accordance with the Decree of 21 April 1919, No 603, on compulsory insurance against invalidity and old-age, were approved.

(2) Recently the *Istituto Nazionale per la Mutualità Agraria* has set up, with the help of the Ministries concerned, of the *Istituto Nazionale di Credito per la Cooperazione*, of the *Cassa Nazionale per le Assicurazioni Sociali*, etc. a Section for teaching co-operation, mutuality, rural hygiene and thrift, with the object of spreading a knowledge of co-operative, mutual and provident institutions, and for training managers and officials of co-operative societies and mutual insurance societies and promoters of hygiene and thrift, by means of short practical courses to be held in the various provinces of the Kingdom. These classes, the last of which, lasting a month, was held in Milan and at which each student received a scholarship of 500 lire, gave excellent results.

The *Istituto* more especially devotes itself to:

(a) the preparation of propagandist pamphlets, model rules and forms, for use in the management and in the book-keeping of societies for mutual insurance against mortality amongst live stock, fire, hail and slaughtering risks; of societies for the interchange of labour amongst peasant proprietors, tenant farmers or metayers and of school-children's mutual aid societies;

(b) spreading by means of lectures, classes and meetings a knowledge of the principles of mutuality, agricultural co-operation and thrift, as well as of the rules for organizing and working the different institutions;

(c) promoting the federation of the above institutions, especially of mutual insurance societies, so as to consolidate the organizations and encourage reinsurance with the *Istituto Nazionale delle Assicurazioni* and other societies;

(d) promoting systems for the prevention or restriction of losses affecting small holdings, more especially by introducing more sanitary systems of stock-farming.

The *Istituto* secures the means for carrying out its programme by temporary or permanent contributions paid by the central and local administrative bodies from corporations, associations, and private individuals by the income obtained from its capital fund; by possible donations made by the institutions on whose behalf it labours and by legacies and gifts.

The *Istituto* works through (a) a Committee of Management; (b) a Board of Accountants; (c) a Director General. The Committee of Management consists of two delegates appointed by the Ministry of Industry, Commerce and Labour, selected from among the officials who have special knowledge of the problems affecting mutuality, co-operation and private insurance; two delegates appointed by the Ministry of Agriculture selected from among the officials with special knowledge of agriculture and stock-farming; two delegates appointed* by the Ministry of the Interior selected from among the officials with special knowledge of sanitation and preventive care of cattle; and a representative of the *Istituto Nazionale delle Assicurazioni* with special knowledge of the problems of reinsurance. Other persons with special knowledge of local conditions affecting agricultural thrift, mutual insurance and co-operation may also be called to serve on this Committee of Management. The Director General is a member with the right to speak but not to vote. He has the technical and administrative direction of the Institute and sees to carrying out the decisions taken by the Committee of Management. The latter may decide on the formation of sections for special purposes, and on the formation of local offices linked together and communicating with the headquarters of the *Istituto*.

Undoubtedly now that it has thus been reorganized, the *Istituto Nazionale per la Mutualità Agraria* will be able to carry out satisfactorily the important task entrusted to it by the recent measures enacted for agricultural mutual societies and by its new rules to the great advantage of agriculturists, and more especially of peasant proprietors, produce-sharing

and other tenants, who only by uniting in soundly organized and scientifically managed associations for mutual insurance can protect themselves against the losses to which crops and stock are subject.

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3 THE RESULTS OF COMPULSORY INSURANCE AGAINST ACCIDENTS IN AGRICULTURE. — *Rassegna della Previdenza Sociale*, N. 5, Rome, May, 1920.

A Decree, N. 1450, dated 23 August 1917, introducing into Italy compulsory insurance against accidents in agriculture, was dealt with in our issue of March 1919. The management of this branch of insurance was entrusted in the main to the *Cassa Nazionale d'Assicurazione per gli Infortuni sul Lavoro* (1). The *Rassegna della Previdenza Sociale*, which is the organ of that Institute, publishes some interesting statistics on the results of agricultural insurance from 1 May (on which date the law on compulsory insurance in agriculture came into force) until 31 December 1919. During that period 25,450 accidents were reported. To these may now be added 596 accidents which occurred in 1919 and were reported in the first three months of the current year (495 in January, 57 in February, 44 in March). Thus the total number of accidents last year exceeded 26,000. It should be noted that the district offices of Central Italy, Emilia and Romagna alone (7 of the 31 district offices of the *Cassa*) accounted for nearly three fifths of the total reported number (14,142 out of 25,540), while all the district offices for Southern Italy and the Islands (15 of the 31) only reported 2,029 cases or 11.51 per cent. of the total. The percentages of deaths are, however, very different. The first 7 district offices reported about 25 per cent. of the total deaths, as against 28.4 per cent reported by the 15 offices for the South and Islands.

The deaths during the last three months of 1919 are less numerous (201 as compared with 252 for the previous quarter) but the percentage as compared with the total number of accidents reported shows a slight increase. An enquiry into the causes of death in agricultural labour shows that this increase is partly due to work performed in felling trees, lopping branches, and gathering and carrying wood, which is performed during those last months of the year, during which labourers risk falling from high trees or from the carts on which the wood is carried, or being crushed by falling trunks.

The total number of fatal accidents reported in 1919 was 539, to which must be added 26 notified during the first quarter of the current year, thus bringing the number up to 565, a considerable figure but one which is certainly inferior to the actual facts. Many deaths were not notified owing to ignorance as to the existence of the law.

(1) For the organization and working of this public institution, the official organ for workmen's compensation, see the article in our issue of June-July, 1919.

Part III: Credit

FEDERATED MALAY STATES.

THE PLANTERS LOANS BOARD

The following account of the formation and work of the Planters Loans Board of the Federated Malay States has been kindly furnished to us by the Board itself.

The Government of the Federated Malay States originally resolved to lend financial assistance to the development of the agricultural resources of the country in the year 1905.

So little was known of the splendid fertility of the virgin soil of the country at that time and the number of estates in actual being so few, that applications for assistance for the first two to three years were negligible, but as time went on and the prospects of the successful cultivation of the Para rubber tree (*Hevea Brasiliensis*) and the coconut palm became more widely known, with the alienation of considerable tracts of country for the purpose, bringing an influx of capital and a largely increased population, these industries — particularly rubber — rapidly assumed considerable importance. People of all nationalities already in the country began to take a keen interest in the cultivation of the rubber tree and with the great development work going on all round and the evident desire of all to extend their agricultural interests, the Government system of loans to planters steadily expanded and to such an extent that the administration found itself somewhat seriously handicapped in coping with applications for assistance.

With a roll of 136 properties, both large and small, benefitting from the fund to the extent of nearly \$4,000,000 and numerous applications still pouring in, Government towards the end of the year 1915 decided it would be expedient to put the whole system on a more satisfactory footing and with this end in view an Advisory Board to review the whole position and handle all new applications was appointed and a permanent staff engaged.

This Board, which consisted of the Director of Agriculture, Federated Malay States and Straits Settlements (Chairman), the British Resident of Selangor, two leading planters, and the head of one of the largest

mercantile concerns in the country, came into being early in 1914 and continued in an advisory capacity until towards the end of the year 1915 when a special enactment was introduced and passed in Council creating it an executive body under the style and title of "The Planters Loans Board Federated Malay States."

Constitution. — The Board is a body corporated and by the name of "The Planters Loans Board" has continuous succession and has and may use a common seal and may acquire, hold, dispose of and otherwise deal with movable and immovable property and may sue and be sued in all courts and in all manner of suits and proceedings and may do all other matters and things incidental to or appertaining to a body corporate. The members of the Board, who shall number not less than 3 nor more than 7, are nominated by the Chief Secretary to the Government, Federated Malay States and of whom not more than half may be officers employed in the public service.

The Chief Secretary also nominates the Chairman.

All nominations must be published in the *Government Gazette*.

Members ordinarily retain their membership for a period of 5 years, unless expressly nominated for a shorter period, but are at liberty to resign at any time. Members who absent themselves from the Federated Malay States for a period exceeding 2 months are deemed to have resigned their membership.

The Chief Secretary has power to remove any member from the Board or from the Chairmanship at any time by notification in the *Government Gazette*.

The Board as at present constituted consists of the Director of Agriculture, Federated Malay States and Straits Settlement (Chairman); Hon. Mr. R. C. M. Kindersley, Member Federal Council (planter); E. M. Skinner, Esqr., J. P. (estate agent); D. F. Topham, Esqr., J. P. (estate agent) i. e. 2 members are officers in the public service and 3 are unofficial members.

Funds. — The capital of the Fund is limited to \$4,000,000 (1), a sum set aside by Government from public monies for the purpose. The Treasury acts as bankers to the Board in so far as the Board draws on the Treasury for all monies required (subject to the limit of \$4,000,000).

Inversely all monies collected by the Board are paid into the Treasury.

Interest. — Interest is charged by the Board at such rate or rates as may be in force at the time of making loans.

The usual rate is 7 % and of all interest collected, 75 % is credited to public revenues, while the Board retains 25 % towards paying administration expenses and the creation of a reserve fund to meet possible bad debts.

Loans. — Loans heretofore have been made only to planters (i. e. planting limited liability companies, private syndicates and individuals) but the powers of the Board are being extended to admit of loans being made to co-operative agricultural societies and to native agriculturists. Loans are granted exclusively for the benefit of land situate within the

(1) The dollar (= 100 cents) in use in Malaya is equal to 2s. 4d.

boundaries of the Federated Malay States and as a general rule are expressly for the purpose of assisting immature properties to reach the producing stage. They are given for a varying period of years having regard to the age of the clearings at the time the loan is granted and the date when it may reasonably be expected the property will be in a position to repay from revenue.

The loans are usually issued by monthly instalments on the production of satisfactory accounts for the preceding month and the instalments may be withheld at any time if the Board has any doubt that the money is not being properly expended or if the property is adversely reported on.

The two principal agricultural industries in Malaya — rubber and coconuts — are to date the only commodities which have derived any benefit from the Fund though the Board is at all times open to entertain sympathetically applications for assisting the cultivation of other agricultural products — such for instance as the African oil palm (*Elaeis*) and the lime fruit tree, which are being grown experimentally on a commercial scale with promising results.

Loans to returned ex-Service men under the Government "War Service Land Grant Scheme" are to be made from the Planters Loans Fund and will be managed and controlled by the Board.

Security. — The security required for all loans granted is a charge (mortgage) registered under the laws of the country in force for the time being on the land for the benefit of which the money is lent and in the absence of any express stipulation to the contrary the following conditions are implied in all charges :

(a) that the chargor will properly and judiciously use the moneys secured by the charge for the purposes for which the same are by the terms of the charge expressed to be advanced to him and will not use such moneys for any other purpose whatsoever ;

(b) that the chargor will pay at the times and in the manner required by the terms of the charge all amounts accruing due thereunder, whether by way of interest or otherwise ;

(c) that the chargor will duly comply with all conditions and obligations attaching to the title for the land charged, whether in respect of cultivation, building, payment of rent or otherwise, and will keep all buildings on the said land in good repair ;

(d) that the chargor will not transfer to any other person any portion of his interest in the land charged without the written consent of the Board under its common seal ;

(e) that the chargor will furnish month by month to the Board proper accounts of revenue from and expenditure on the land charged and such other information as the Board may from time to time require ;

(f) that the chargor will insure and keep insured in the name of and to the satisfaction of the Board all buildings, machinery and plant in or upon the land charged, except such as may be exempted by agreement, and all produce of the land charged from the harvesting of such produce until the

sale thereof and that proper evidence of such insurance shall be produced to the Board from time to time as required ;

(g) that no dividend or bonus shall be paid to any person out of the profits arising from the land charged until all moneys secured by the charge shall have been paid to the Board in full ;

(h) that all profits arising from the land charged which are not required for the due cultivation and maintenance thereof shall be devoted to the payment to the Board of the moneys secured by the charge ;

(i) that the chargor will pay to the Board on demand all expenses which may from time to time be incurred by the Board in the employment of a person or persons to visit, inspect and report on the land charged ;

(j) that the chargor will pay to the Board on demand all costs, charges and expenses whatsoever which may be paid or incurred by the Board in any exercise of its rights or powers occasioned by default of the chargor in the observance or performance of any undertaking or condition expressed or by the enactment or otherwise implied in the charge ;

(k) that no part of the land charged which is not cultivated at the date of the execution of the charge shall without the written consent of the Board under its common seal be cultivated until all moneys secured by the charge shall have been paid to the Board in full.

Inspections. — All properties benefitting from the Fund are periodically inspected and reported on for the information of the Board. As a general rule some well known planter resident near the property in question is employed at a nominal fee to undertake the work and the borrowers are required by law to bear the expense of such visits.

Staff. — The Board occupies offices situate in the business centre of the Town of Kuala Lumpur (the capital of the Federated Malay States) and employs its own staff entirely unassociated with the public service.

Meetings. — The Board meets regularly twice every month and more often if necessary.

Accounts. — Full and proper accounts of all transactions are kept by the Board which are subject to an audit at least once in every year by such person or persons as may be appointed for the purpose by the Chief Secretary to Government and before the 31st day of March in every year render to Government a balance sheet and other relative documents setting out fully the position of the fund at the close of business on the 31st day of December accompanied by a report on the working of the fund during the preceding 12 months.

General. — There is little doubt that the policy of the Government in inaugurating the Fund has been of considerable benefit toward the agricultural development of the country and there are many residents — both past and present — who have good reason to bless the administration for rendering aid in times of stress and in seeing them through their difficulties. In general, this applies equally to all times but in particular to the year of the outbreak of the Great War (1914) when the financial stress was so great that many properties would have gone to the wall had it not been for the assistance given by the Planters Loans Fund and again in the year

1918 when owing to the uncertainty of the whole situation and the ruinous prices obtaining for the produce, the rubber industry passed through a very nerve-racking crisis.

On the other hand, Government has been amply repaid inasmuch as (1) no losses have been incurred, (2) a moderate and reasonable rate of interest on the monies lent has been regularly earned, (3) the benefits, both direct and indirect, derived from the development of the country have been enormous and (4) Government has the satisfaction of seeing both the rubber and copra industries established on a sound and flourishing basis.

Synopsis of the Board's Work 1916 to 1919.

(A) *Loans.*

1916.		
No. of loans as at 1st January . . .	—	129
No. of applications dealt with . . .	26	
Refused &/or still pending . . .	17	9
	—	—
		138
No. of loans repaid	47	
		138
No. of loans as at 31st December . .	91	
	==	==

Analysis

Cultivation	No. of estates	Total cultivated area	Amount of loans	Amount per cultivated acre
Rubber	78	22,886 ³ / ₄	\$1,975,800.11	\$86.15
Rubber & coconuts combined	9	2,603	210,983.25	81.05
Coconuts	4	1,733	115,000 —	66.35
	91	27,222 ³ / ₄	\$2,301,783.39	\$84.55

1917.

No. of loans as at 1st January . . .	—	91	\$2,301,783.39
No. of applications dealt with . . .	29		
Refused &/or still pending	19	10	250,085.—
	—	—	—
		101	\$2,551,868.39
No. of loans repaid		35	906,281.80
No. of loans as at 31st December . .		66	\$1,645,586.59

Analysis.

Cultivation	No of estates	Total cultivated area	Amount of loans	Amount per cultivated acre
Rubber	53	13,872 $\frac{3}{4}$	\$1,717,383 34.	\$87.75
Rubber & coconuts combined	7	1,765	158,918.25	90.04
Coconuts	66	3,423 $\frac{1}{2}$	259,285.—	78.66
	66	19,061 $\frac{1}{4}$	1,045,586.59	86.28

1918

No. of loans as at 1st January . . .	—	60	\$1,645,586.59
No. of applications dealt with . . .	83		
Refused &/or still pending . . .	51	32	1,282,142.75
		98	2,927,729.34
No. of loans repaid		11	380,583.44
No. of loans as at 31st December . .		87	\$2,547,145.90

Analysis.

Cultivation	No of estates	Total cultivated area	Amount of loans	Amount per cultivated acre
Rubber	74	22,490 $\frac{3}{4}$	\$2,088,085.65	\$92.84
Rubber & coconuts combined	7	1,528	141,918.25	92.87
Coconuts	6	3,423 $\frac{1}{2}$	317,142.—	92.63
		28,442 $\frac{1}{4}$	\$2,547,145.90	\$92.82

1919.

No. of loans as on 1st January . . .	—	87	\$2,547,145.90
No. of applications dealt with . . .	59		
Refused &/or still pending	29	30	1,060,572.—
		117	\$3,616,717.90
No. of loans repaid		27	992,863 04
No. of loans as on 31st December . .		90	\$2,623,854.30

Analysis.

Cultivation	No. of estates	Total cultivated area	Amount of loans	Amount per cultivated acre
Rubber	81	22,038 $\frac{1}{4}$	\$2,257,167.30	\$102.42
Rubber & coconuts combined	4	1,243 $\frac{3}{4}$	64,500.—	51.86
Coconuts	5	2,126	302,187.—	124.56
	<u>90</u>	<u>25,708</u>	<u>\$2,623,854.30</u>	<u>\$102.06</u>

(B) Interest.

	Collected	Retained	Credited to public revenues
1916	\$209,034.01	\$52,258.51	\$156,775.50
1917	131,955.70	32,988.93	98,966.77
1918	91,963.94	22,990.98	68,972.96
1919	150,278.26	37,569.56	112,708.70
	<u>\$583,231.91</u>	<u>\$145,807.98</u>	<u>\$437,423.93</u>

(C) Reserve Fund.

Balance as on 31st December 1915	\$260,000.—
Added during 1916	40,000.—
" 1917	20,000.—
" 1918	20,000.—
" 1919	10,000.—
Balance as on 31st December 1919	<u>\$350,000.—</u>

So far no bad debts have been incurred and the money standing to the credit of the reserve fund is all invested in war loan stocks, the interest derived therefrom being nearly sufficient to cover the whole of the Board's expenses of administration.

MISCELLANEOUS INFORMATION ON CREDIT
IN SEVERAL COUNTRIES

SPAIN.

THE RURAL BANK OF THE NATIONAL CATHOLIC AGRICULTURAL CONFEDERATION. — *Revista social y agraria*, Year 11, No 15 Madrid, July 1920

On the 9th July 1920 a great general agency of the National Catholic Agricultural Confederation was formally established under the name of the Rural Bank. Its purpose is to organize the purchase and sale of supplies required by or produced by the agricultural syndicates and federations of Spain. The former commercial branch of the Confederation is now suppressed.

The Bank is now actively engaged in organizing all the services required to meet the needs of the syndicates and federations such as credit and transport. It is also attending carefully to the selection of the staff suited to the various functions, and to organizing the respective agencies, warehouses, silos, and other matters connected with the trade in the produce of the associated bodies.

UNION OF SOUTH AFRICA.

THE LAND AND AGRICULTURAL BANK OF SOUTH AFRICA. — Report of the Land and Agricultural Bank of South Africa for the year ended 31st December 1919 Johannesburg, 1920.

In 1919 the Land and Agricultural Bank of South Africa received 2,662 applications for ordinary advances totalling £1,976 221. This was a considerable increase on the applications for the previous year (2,200 for a total of £1,524,739), but both the number and the amount of the applications are still below the figure reached before the War compelled the Bank temporarily to cease making advances. The Report for 1919 complains that the Bank is little known in certain parts of the Union. This is notably the case in the Cape Province; the Bank is better appreciated in the other provinces, which had their own land banks prior to the formation of the Union.

The loans actually made during the year numbered 1,871 and amounted to £1,172,530, making an average of £627 per loan. As between the provinces the advances were thus divided: Transvaal, 1,171 advances, £553,350; Orange Free State, 383 advances, £338,070; Natal, 147 advances 135,355; Cape Province, 170 advances, £145,775.

The purposes for which the advances were made and the amount of the advance for each purpose were as follows: Improvements, £68,260; purchase of stock, £76,512; discharge of existing liabilities, £256,869; purchase of land, £770,889.

The applications for loans for putting up fencing numbered 162 and amounted to £21,742, a considerable increase over the figures for the previous year. Of the applications received, 69 amounting to £11,596 were

approved ; they related to 188.67 miles of fencing, the average advance being £61 per mile. The report notes a growing tendency, more particularly among small stock farmers, to erect vermin-proof fencing.

During the year 178 applications for advances for the construction of dipping tanks, amounting to £21,782, were received by the Bank. Of these 127 totalling £15,005 were approved ; the average cost per tank was thus £118. The amount paid out during the year in respect of dipping tank advances was £11,873, which includes £3,000 paid to the Native Affairs Department for the erection of tanks in native areas. The importance of systematic dipping for the eradication of scab is becoming more fully realized, but the difficulty still exists that the supply of cement is not equal to the demand. The Bank has decided that in future it will not make advances for the purchase of stock unless it is satisfied that there is suitable provision for dipping.

The advances on second mortgage authorized by Act 30 of 1916 as a temporary measure for the relief of the distress caused by the severe drought of 1915 and 1916 had nearly all been repaid. Of 41 advances made, 38 were repaid by the end of 1919 ; in one case the property mortgaged was sold and the balance owing will be paid as the instalments of the purchase price are received. In another case the amount has been repaid in full since the end of the year. Only one advance, therefore, is really outstanding, and it was expected that the balance due would shortly be repaid. Commenting upon these advances the Report says the State may be congratulated on their success ; they came as a relief to debtors at a time of desperate need, and the fact that every penny advanced will be recovered not alone justifies the help given, but indicates how wise and judicious a discretion was exercised by the local committees who considered the applications.

Advances on personal security were made for the relief of distress under Act 28 of 1916. These advances were made out of a special vote by Parliament and not out of the Bank's funds, but the Bank's machinery was used to administer the money at a remuneration of 5 per cent. on the amount recovered. Advances totalling £50,538 were made to 293 farmers to purchase live stock, principally goats and sheep. At the end of 1919, the amount repaid was £42,078 and £87 had been written off as loss on the sale of the stock of five defaulting debtors. The amount outstanding was £8,373 and the payments in arrears were £103 for interest and £2,076 for capital. The comparatively large amount of arrears was due to the fact that drought had occurred in the "distress" area during the year. The Report strongly urges that more attention should be given to the conservation of fodder and suggests that the Bank's activities might well include loans for the building of silos on the same lines as the loans for the construction of dipping tanks.

During the year 12 co-operative societies applied for loans amounting to £146,500, all of which were granted. The loans to societies which were outstanding at the end the year amounted to £386,226.

Part IV: Agricultural Economy in General

ARGENTINA.

THE HOMESTEAD LAW.

SOURCES :

MITTEILUNGEN DES DEUTSCHEN SÜDAMERIKANISCHEN UND IBERISCHEN INSTITUTS. — Stuttgart und Berlin, 1919.

ESTADÍSTICA AGRÍCOLA 1916-17. Dirección General de Estadística y Economía Rural. Buenos Aires 1917.

VALLE (Paul): L'Argentine telle qu'elle est. Paris, Guilleminot.

The Argentine law on the *homestead*, which had been fully discussed in Parliament since 1917, came into operation during 1919. The chief aim of this law, which brings about a great innovation in land tenure, is to facilitate the colonization and cultivation of those parts of Argentina, which, owing to their distance from large centres, their lack of means of communication, and the poverty of their soil, offer serious obstacles to real colonization.

The territories which will more especially benefit by this law are Chaco, Formosa, Misiones and Chubut; these districts are greatly inferior to the other parts of the Republic, where owing to favourable circumstances generations of colonists can succeed one another in cultivating the same land.

Before going into the law on the *homestead* let us consider the agricultural conditions of the above mentioned territories, for which the law is specially important.

§ 1. AGRICULTURAL CONDITIONS OF THE TERRITORIES OF CHACO, FORMOSA, MISIONES AND CHUBUT.

Territory of Chaco. — This territory has an area of 13,663,500 hectares and a population hardly numbering 60,635 inhabitants. Two thirds of the country are covered with forests, and it is only near the lagoons that there are great zones of meadow land, which are much sought after for

cultivation. The southern part of the territory is almost entirely destitute of water; this is one of the worst drawbacks to this region. It should be noted, however, that, although this territory has not yet been completely explored, and large tracts of it are uncultivated, still during these last years appreciable progress has been made in working the natural resources of the country. Thus large quantities of timber have been felled in its forests, and there has been some increase in cattle-breeding and in agriculture, since the above-mentioned vast prairies have begun to be used.

The territory is divided into six departments, each one of which is the centre for the exportation of timber or colonial produce, which is slowly developing and to which the *homestead* law will give a considerable impetus. It should be noted that the greater part of the best land, situated near navigable rivers and thus possessing means of communication, does not belong to the State, but to private individuals to whom it was long ago given by the State itself; these people have done nothing to improve their lands. The *homestead* law deals with this question and has special provisions on the subject.

The following table shows that there has been an increase in the cultivated area of Chaco during recent years as far as regards sugar cane, cotton, maize and lucerne; tobacco-cultivation has however decreased, as for this crop special labour, which is insufficient in the region, is necessary.

Area of territory 13,663,350 ha.

	1895 ha.	1914 ha.	1916 ha.
Area under cultivation	8,567	22,000	32,300
Under wheat	10	—	—
» maize	4,464	8,000	8,000
» lucerne	470	450	500
» sugar	1,455	2,700	5,000
» cotton	100	2,450	2,800
» tobacco	422	150	60

Territory of Formosa. — This territory also, which has not yet been entirely explored, is rich in forests and pasture land. The principal industries are those of *quebraho* and cattle-raising, whilst the most widely diffused cultivation is that of lucerne, maize and sugar-cane.

A characteristic of this country are vast estates, situated in the coastal zone, which have been left uncultivated and deserted by the few proprietors to whom the Government has granted them; these estates are susceptible of intense and productive cultivation. Other parts of the territory are entirely deserted, so that, as has occurred in some cases, they can be worked by whoever cares to squat on them, although he holds no form of title-deed.

The land situated along the coast and designated by the term "colonies" does not yield what it should, because there is not a sufficient number

of colonists on it. Until quite recently there were only 239 families colonizing 550,000 hectares of land.

The question of agricultural labour must be solved if this land, as well as Chaco is to be colonized. The following table shows the different crops of the territory :

Area of territory	10,721,800 ha.		
	1895 — ha.	1914 — ha.	1916 — ha.
Area under cultivation	3,265	23,250	17,180
Under wheat	39	100	500
» maize	276	4,500	2,000
» lucerne	26	7,500	3,000
» sugar	1,080	100	900
» cotton	102	—	—
» tobacco	102	—	10

Territory of Misiones.— This territory can be divided into two zones, the first, or northern, zone is entirely covered by forests ; the second, or southern, zone is occupied by a few colonies or agricultural centres. These centres have sprung up spontaneously, and colonization has taken place in this zone without being guided in any way. From this fact the need for a limitation, or division, of the land arises, so that each occupier may become owner of his lot and cultivate it on an intensive system, rather than extend his cultivation to adjoining land.

The principal industries of this region are forestry and the most important one of maté of the production of which we have no precise figures. Unlike the territories of Chaco and Formosa, Misiones is well irrigated by numerous water courses, which render it possible to undertake any form of cultivation. The following table shows the crops in this territory ; we notice a considerable increase in sugar-cane, maize and lucerne. Other crops have remained stationary and some, notably tobacco, have diminished considerably owing to the decrease in immigration :

Area of territory	2,982,000 ha.		
	1895 — ha.	1914 — ha.	1916 — ha.
Area under cultivation	26,348	32,370	29,260
Under wheat	59	500	500
» maize	6,246	21,000	17,200
» lucerne	623	500	700
» cotton	90	—	—
» tobacco	2,310	500	500

Territory of Chubut.— This region is poorer than the others mentioned, particularly because of the total absence of water. The western part

alone is rich in valleys and in large tracts of forest. It is in this locality that for many years an agricultural and pastoral colony has been in formation, which is the most important centre of population of this zone. The cultivation carried out in a part of this valley, consisting of grain, lucerne and tobacco, forms more than two-thirds of the total cultivation of the territory.

The following table shows the crops in this region :

Area of territory	24,203,900 ha.		
	1895	1915	1916
	ha.	ha.	ha.
Area under cultivation	8,566	22,000	22,900
Under wheat	4,659	5,200	6,500
» lucerne	554	8,500	7,500
» cotton	90	—	—
» tobacco	2,310	500	900

§ 2. THE HOMESTEAD LAWS.

Having thus briefly examined the state of the territories of the four regions which are least inhabited and least progressive as regards colonization, and for which this law was more particularly framed, we will explain the fundamental principles and the most important provisions of the law itself.

In the first place the Government has the right to grant land for cultivation to families of colonists. Such land becomes the property of the family and cannot be sold, mortgaged or ceded except to another family and only on obtaining the consent of the authorities.

The grant of ownership by the Government will not hold good and will be considered null before the law, if the land is not occupied and farmed. In this case the forfeited land can be granted to a neighbouring farmer, on condition that the total land he shall then hold will not exceed the maximum area allowed under this law.

Not more than one half of the annual returns may be sold or mortgaged to pay off debts contracted by the colonist in the management of his land.

Land can be granted to every citizen, even of foreign origin, who asks for it. Women, either single or widows, can ask the State to grant them a piece of land from 20 to 200 hectares in area.

On the death of the father the whole family inherits all his rights : sons who are of age can, like any other citizen, ask the State for another grant of land situated in the same or another district, or the original farm may be subdivided among the family.

The Government reserves the right to found, in suitable places, villages, schools and other institutions for the benefit of the colonists.

According to this law it is not necessary that the colonist should be given, as a proof of his right to the land, a legal title-deed; the State's declaration that he has been granted the land he applied for, together with a plan, registered by the authorities, showing the land in question is sufficient proof.

As regards already existing landowners, who own by right of regular title deeds parcels of land free from all charges, the law gives them the right to declare before a judge what part of their land they intend to keep as their *homestead*. If the landowner owns more than one parcel of land, the declaration holds good for one only, which can be chosen by the owner. This right is only granted, however, when the value of the *homestead* is not above 10,000 pesos m. n.

The law further provides for supplying the colonist with the financial assistance of which he may stand in need for equipping his farms, or for buying cattle, farm implements or seeds. This is done by means of the loans which the National Bank grants for the encouragement of agriculture in Argentina.

The area of the *homestead* must not exceed 200 hectares and its size must depend on the sort of cultivation that the quality of the land needs.

Finally the law considers the position of farmers who are at present occupying land belonging to the State, without having acquired the right to it by contract; the law provides that they can establish *homesteads* on a piece of land of their own choice, even though they be not fathers of families, if they have possessed the land since 1916.

The Government will issue suitable regulations to complete the provisions of the law we have been considering, for regulating the cultivation of all the zones of the territory in which *homesteads* will be set up, because, as we have seen, these zones differ very much, in respect of the nature of the soil, the climate and the means of irrigation.

GREAT BRITAIN AND IRELAND.

SETTLEMENT AND EMPLOYMENT ON THE LAND OF DISCHARGED SAILORS AND SOLDIERS IN ENGLAND AND WALES.

SOURCES (OFFICIAL):

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- THE SAILORS AND SOLDIERS (GIFTS FOR LAND SETTLEMENT) ACT 1916.
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- SOLDIERS AND SAILORS (GIFTS OF LAND). Parliamentary Question and Reply. *Ibid.*, Vol. XXIII, No. 12. London, March 1917.
- SCHEME FOR THE SETTLEMENT OF EX-SERVICE MEN., *Ibid.* Vol. XXIV, No. 3. London, June 1917.
- THE PURCHASE OF LAND SUITABLE FOR SMALL HOLDINGS. Circular addressed to County Councils by the Board of Agriculture. *Ibid.*, Vol. XXV, No. 7. London, October 1918.
- SETTLEMENT OF EX-SERVICE MEN ON THE LAND. Circular addressed to County Councils by the Board of Agriculture. *Ibid.*, Vol. XXV, No. 7. London, October 1918.
- AGRICULTURAL TRAINING FOR SERVICE MEN: BOARD OF AGRICULTURE GRANTS. Notice issued by the Board of Agriculture. *Ibid.*, Vol. XXV, No. 10. London, January 1919.
- LAND SETTLEMENT FOR EX-SERVICE MEN. Letter addressed to County Councils by the Board of Agriculture. *Ibid.*, Vol. XXV, No. 10. London, January 1919.
- LAND SETTLEMENT FOR SOLDIERS. Notice issued by the Food Production Department of the Board of Agriculture. *Ibid.*, Vol. XXV, No. 11. London, February 1919.
- LAND SETTLEMENT. Circular addressed to County Councils by the Food Production Department of the Board of Agriculture. *Ibid.*, Vol. XXV, No. 11. London, February 1919.
- LAND SETTLEMENT. Circular addressed to County Councils by the Food Production Department of the Board of Agriculture. *Ibid.*, Vol. XXV, No. 12. London, March 1919.
- NOTE ON LAND SETTLEMENT PREPARED BY THE ESSEX COUNTY COUNCIL. *Ibid.*, Vol. XXV, No. 12. London, March 1919.
- TRAINING AND PLACING IN EMPLOYMENT OF EX-SERVICE MEN WHO DESIRE AGRICULTURAL WORK. Circular addressed to Agricultural Executive Committees by the Food Production Department of the Board of Agriculture. *Ibid.*, Vol. XXVI, No. 1. London, April 1919.
- PROGRESS IN SETTLEMENT OF EX-SERVICE MEN. Notice issued by the Board of Agriculture. *Ibid.*, Vol. XXVI, No. 2. London, May 1919.
- AGRICULTURAL TRAINING OF EX-OFFICERS AND MEN. Notice issued by the Board of Agriculture. *Ibid.*, Vol. XXVI, No. 2, London May 1919.

- OFFICERS' AGRICULTURAL TRAINING SCHEME: RESIDENTIAL TRAINING WITH SELECTED FARMERS. Circular addressed to County Agricultural Executive Committees by the Board of Agriculture. *Ibid.*, Vol. XXVI, No. 3. London, June 1919.
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- GRANTS IN AID OF AGRICULTURAL TRAINING FOR OFFICERS. Announcement made by the Board of Agriculture. *Ibid.*, Vol. XXVI, No. 5. London, August 1919.
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- TRAINING OF DISABLED MEN IN AGRICULTURE. Circular addressed to Agricultural Executive Committees by the Board of Agriculture. *Ibid.*, Vol. XXVI, No. 8. London, November 1919.
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- PRESENT POSITION OF LAND SETTLEMENT. Circular addressed to County Councils by the Board of Agriculture. *Journal of the Ministry of Agriculture*, Vol. XXVI, No. 10. London, January 1919.
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As early as 1915 the question of enabling discharged sailors and soldiers to find occupation on the land was under consideration by the British Government. The question at once presented itself under the two distinct aspects of "settlement" and "employment," that is, the provision of land for those who wished to cultivate it and the finding of employment for those who merely wished to become agricultural labourers.

At first the only form of settlement contemplated was the provision of small holdings for individual cultivators, but subsequently another form arose, the provision of farms to be worked on a profit sharing system by groups of settlers. In connection with both settlement and employment, provision has had to be made for training and special forms of training have also arisen which strictly speaking cannot be regarded as training either for settlement or for employment. These are the training of ex-service men who desire to become farmers, but are prepared to take land in the ordinary way, without the intervention of the State, and the training of ex-officers for such posts as officials of the Board of Agriculture, county agricultural officials, or estate agents.

There are further the special cases of the training of disabled officers and men.

§ I. RECOMMENDATIONS OF DEPARTMENTAL COMMITTEES.

In the summer of 1915 a Departmental Committee was appointed by the President of the Board of Agriculture "to consider and report what steps can be taken to promote the settlement or employment on the land in England and Wales of sailors and soldiers, whether disabled or otherwise, on discharge from the Navy or Army."

The Committee first presented a short Interim Report making recommendations relating to the training of disabled men and subsequently a Final Report, divided into two parts dealing respectively with "Settlement" and, "Employment."

In its Report on Settlement, the Departmental Committee recommended (a) that the State, acting through the Board of Agriculture, should undertake the provision of small holdings for ex-Service men who were prepared to settle in any place where land could be provided, and (b) that the County Councils, acting under the Small Holdings Acts (with suggested amendments) should provide land for ex-Service men who were not prepared to move to the State colonies, or who desired accommodation holdings to be worked in conjunction with some other business.

Settlement on the colony system was regarded as the only system possible for the State, owing to the impracticability of providing isolated holdings all over the country, and of arranging for the necessary expert guidance and business organization. The Committee considered that the ideal settlement would be a village community of at least 100 families all interested in the development and cultivation of the land, but including amongst them those engaged in trades subsidiary to agriculture. The minimum acreage to be taken for a fruit and market garden settlement should, it was estimated, be 1,000 acres, and for settlement on dairying or mixed holdings 2,000 acres. Larger areas would reduce the cost of management and increase the advantage to be gained from collective marketing.

The fruit and market garden holding was regarded as being, on the whole, the most suitable type of holding for men with little or no previous experience of agriculture, but as the home producer has a practical monopoly of milk, the Committee expressed the wish to see a large increase of small grass holdings. The small mixed farm of from 35 to 50 acres, comprising both arable and grass land, was not recommended for ex-service men until they had gained considerable experience, and poultry-farming was not recommended as a staple occupation.

It was suggested that immediate steps should be taken by the Board to acquire and equip land for three pioneer colonies (illustrating the different types of holding) comprising 5,000 acres in all.

A system of tenancy was recommended in preference to ownership of the holdings. Under the former system, the State could exercise effective supervision and control and could assure the preservation of the small holdings it created. From the point of view of the small holder, tenancy

offered greater mobility, occupying ownership being an impediment in the way of a man who desired to rise. It also enabled him to employ his capital in stocking and working the holding, instead of sinking part of it in purchase. The Committee noted that during the seven years in which the Small Holdings Act had been in operation, applications for the purchase of holdings had been very few in number.

In order to place their scheme on a sound economic basis the Committee recommended that sufficient rents should be charged to meet the interest on the cost of the land and the equipment, the statutory outgoings and a reasonable allowance for repairs, insurance, management, etc. The cost of the educational staff of the colony would not be charged on the rent.

While applicants with experience and capital might be allowed to take holdings at once, it was considered necessary that men with little or no previous experience should be given some preliminary training. The Committee suggested that the Board of Agriculture should appoint a manager to conduct the land acquired as a large farm and that the men without experience should be offered employment at a weekly wage, together with a cottage and garden. When they had acquired sufficient experience to justify making them tenants, a portion of the farm near their cottages should be let to them, provision being made in laying out the farm so that adjoining land could be added in course of time.

Besides the manager (or director) of the colony, the Committee recommended that there should be appointed a practical agricultural or horticultural instructor who would be responsible for the actual training of the men. The colony could draw on the agricultural instructors of the county council for instruction in special branches.

The Committee suggested that in each fruit and market garden colony a depot should be established for the produce of the colony, which should be collected, graded, packed and despatched to market. Until such time as the small holders were able to take over the depot and run it as a co-operative society, the depot should be under the control of the director. Similar arrangements were recommended in other types of colony. In connection with the depot it was thought that provision should be made for dealing with any surplus produce which could not be sold, by the establishment of a jam factory, pulping and drying plant, a creamery, a cheese factory, etc.

Besides the sale depot a store was recommended for the purchase or hire by the small holders of tools, feeding stuffs, etc., and facilities should, it was stated, be provided whereby the small holders would obtain the use of the larger farm implements and machinery and the hire of horses and extra labour. For this purpose the retention of part of the colony as a well equipped central farm was recommended.

The Committee were of opinion that the State should not make direct advances of working capital to ex-Service men, but made several recommendations whereby the amount of working capital required might be diminished. They also recommended that the formation of co-operative credit societies should be encouraged and that, as an experiment, small sums of money should be lent to such societies.

With regard to the provision of small holdings by County Councils the Committee suggested that the Councils should as far as possible establish colonies similar to the State colonies, and they made various recommendations whereby they might be facilitated in doing so.

The Committee strongly opposed the segregation of disabled men or the establishment of colonies for cripples. They recommended that opportunities should be given to disabled men to settle in State colonies or to obtain local small holdings through the county councils. Adequate provision should be made for training them and, after being trained, they should be placed on the same footing as able-bodied men, except that in selecting tenants of small holdings they might be given the preference other things being equal.

The second part of the Report of the Departmental Committee of the Board of Agriculture on Land Settlement for Sailors and Soldiers dealt with the question of employment.

It contained a number of recommendations aiming at making rural life more attractive, but the special recommendations were few. In view of the great shortage of agricultural labour which they anticipated after the war, the Committee evidently thought that even inexperienced men would have no difficulty in obtaining employment in agriculture and they did not recommend the making of any arrangements for the training of such men before they obtained employment. They recommended, however, that opportunities should be provided in every county, after the war, for men employed in agriculture to obtain instruction in manual farm processes, such as ploughing, sheep-shearing, milking, etc., and that the Board of Agriculture should make special grants to local education authorities for this purpose.

Another recommendation was that the Labour Exchange should be developed in rural districts; new branches should be opened in market towns and placed under officials acquainted with agriculture, or else new machinery established under the Board of Agriculture. It was further suggested that an appeal should be made to landowners and farmers to give preference to discharged soldiers and sailors over other applicants for work on the land.

In March 1918, a Committee was appointed by the Minister of Reconstruction "to consider the steps and conditions, apart from the provision of farm and small holding colonies, necessary to attract to employment on the land all returning soldiers who may wish to take up country life, and particularly to induce them to do so in sufficient numbers to secure the maximum output from the land."

Many of the recommendations made by this Committee also aimed at improving the conditions of country life. With specific reference to the provision of small holdings, the Committee made the following amongst other recommendations:

That county councils should be encouraged to obtain suitable land in advance of the demands actually made upon them.

That the State should make a grant of 40 per cent. of the actual cost of equipping small holdings for ex-Service men.

That in regard to stocking a holding the State, where necessary, should lend the working capital, but that the services of agricultural co-operative societies should be utilized wherever possible.

That, subject to adequate safeguards, a small holder should have the option of buying his holding outright, and that the total cost of land and equipment should be advanced to him on the basis of annual repayments including sinking fund and interest.

With regard to training, it was recommended that for those who intend to become large farmers, farm managers, organizers and experts, the training should include a course at an agricultural college as well as on a farm and that studentships should be provided by the State for suitable persons.

The Committee further recommended that men without capital should be encouraged in the first instance to work as wage earners. They suggested that an ex-Service man taking up work as a farm labourer without previous experience should receive not less than the full local rate of wages, but that the State should, in such a case, for a limited period and by way of premium, contribute towards the difference between the man's economic value and the wages paid to him.

§ 2. LEGISLATION.

In order to enable the Board of Agriculture to carry out the recommendation of its Departmental Committee to establish pioneer colonies, the Small Holdings Colonies Act was passed in 1916. This Act authorized the Board to acquire 4,500 acres of land in England (excluding Monmouthshire) and 2,000 acres in Wales and Monmouthshire for the establishment of small holding colonies.

Another act passed in the same year, the Sailors and Soldiers (Gifts for Land Settlement) Act, empowered the Board of Agriculture, or a county council, to accept and administer gifts of land for the settlement of discharged sailors or soldiers.

In 1918, the Small Holdings Colonies (Amendment) Act was passed, whereby the area of land which might be acquired for the establishment of small holdings colonies was raised to 45,000 acres in England (excluding Monmouthshire) and 20,000 acres in Wales and Monmouthshire.

This Act further provided that the Board of Agriculture might, as respects any county, employ the council of that county as its agent for the purposes of the Act. In order to reduce the capital expenditure, it was provided that land should only be acquired by taking it on lease, by purchasing it in consideration of the grant of a rent charge or other annual payment, or by taking it in feu.

With a view to facilitating the acquisition of land by the county councils and by the Board of Agriculture, the Land Settlement (Facilities) Act was passed in 1919.

Under this Act, county councils were authorized to acquire land for small holdings in consideration of a perpetual annuity payable by the

council. At any time the annuity may be redeemed by the council at a price to be fixed by agreement or, failing agreement, at the average price of Government securities yielding annual dividends equal to the amount of the annuity.

For three years from the date of the passing of this Act, orders made by a county council under the Small Holdings and Allotments Act, 1908, for the compulsory acquisition of land will not require to be submitted for confirmation to the Board of Agriculture. Where such an order has been made, the county council may, subject to the payment of compensation, enter upon and take possession of the land on giving fourteen days' notice. The same right of entry is conferred on a county council where it has agreed to purchase land subject to the interest of the person in possession, provided that interest is not greater than that of a tenant for a year or from year to year. The provision also applies in the case of an order authorizing the compulsory hiring of land or of an agreement to hire land.

Powers were also given to the Board of Agriculture, during a period of two years after the passing of the Act, to acquire land compulsorily for the establishment of small holdings colonies and the restrictions on the methods of acquiring land imposed by the Small Holdings Colonies (Amendment) Act, 1918, were removed.

The Land Settlement (Facilities) Act also contained provisions empowering the Board of Agriculture to provide land for small holdings and allotments in counties where the county council was not providing it to such extent as in the opinion of the Board is desirable; authorizing the county councils and the Board of Agriculture to make advances to tenants of small holdings provided by them (1), and giving to women who were engaged in whole-time employment on agricultural work for not less than six months during the war the same preference in the selection of persons to be settled in small holdings colonies or to be provided with small holdings as is given to discharged sailors and soldiers.

The Land Settlement (Facilities) Act confirmed a principle which had already been adopted by the Government and expressed in a circular issued to county councils by the Board of Agriculture in January 1919. In this circular it was stated that the Government had come to the conclusion that while the county councils were the most suitable bodies to be entrusted with the local administration of the creation of small holdings, the financial responsibility for the loss which must inevitably occur in creating them under existing conditions should be borne by the Exchequer and that no charge should be placed on local rates.

The Act (differing but little from the circular) laid it down that the Board of Agriculture should recoup to the county councils the losses incurred up 31 March 1919 on the existing small holdings schemes and the annual losses for each succeeding financial year up to 31 March 1926. Further it was enacted that on 1 April 1926 a valuation shall be made of the

(1) See our issue of September 1920 page 627.

value of the interest of each county council in all land acquired by it under the Small Holdings and Allotments Acts, that the amount of the total capital liabilities of the council in respect of the acquisition and adaptation of such land shall be ascertained, and that the Board of Agriculture shall pay to the council, as from 1 April 1926, interest and sinking fund or other loan charges on the amount by which the liabilities exceed the value of the interest in the land.

It was estimated, when the Land Settlement (Facilities) Bill was before Parliament, that the losses incurred before 31 March 1919 did not exceed £50,000; that the annual deficiency would probably be £250,000 in 1920-21 and might rise to £400,000 in subsequent years. As to the proportion of the capital expenditure on which the Board of Agriculture would have to pay the loan charges after the final valuation in 1926, it was impossible to estimate it, because it depended on the level of values and prices in 1926. If these fell to any thing like the pre-war levels, the proportion might be as much as 40 per cent., or about £8,000,000.

§ 3. SMALL HOLDINGS COLONIES.

The pioneer colonies established by the Board of Agriculture under the Small Holdings Colonies Act, 1916, were four in number. They were situated at Patrington, Holbeach and Heath Hill, all in England, and at Pembrey, in Wales.

The first land to be acquired was an estate of 2,363 acres near Patrington, in the East Riding of Yorkshire, about 15 miles from Hull. It was hired from the Crown on a lease of 99 years at a rental of £3,277 per annum and possession was obtained on 6 April 1917. Subsequently a further 503 acres was acquired at Patrington, bringing the area of the settlement up to 2,866 acres and the rent to £4,027.

The soil was a rich alluvium and it was originally intended that the colony when fully developed should consist of a central farm of about 200 acres and a number of small holdings of the "mixed farming" type, averaging about 35 acres each. It was afterwards decided, however, that the estate should be worked for a time as a single farm on a profit-sharing basis, as it seemed probable that the land could be worked to greater advantage on that basis until it had been ascertained by practical experience to what extent the land was adapted for the intensive crops required on small holdings.

Thus was evolved a type of State colony not contemplated by the Departmental Committee on Land Settlement for Sailors and Soldiers. The profit-sharing system was subsequently adopted in other cases and has thus been described in a publication issued by the Board of Agriculture :

"Under this system a Colony will be managed by a Director as one farm, the settlers being employed by him at the current rate of wages for the district, but receiving in addition a share of the profits arising out of the farming operations.

" Each settler, however, will be provided, if desired, with about half an acre of land adjoining or near to his cottage, any surplus produce from which he will be helped to sell.

" The profits, after the current rate of interest (*e. g.*, 5 $\frac{1}{2}$ per cent.) on capital, and the working expenses of the farm, the rent, rates, repairs and other annual charges had been paid, and after allocating a percentage to a reserve fund, would be divided between capital, management and labour, in proportion to the amounts that had already been paid out to them in the working account. In other words, each settler would receive a dividend on the amount of his wages for the year.

" Settlers on the Colony would be entitled to invest any portion of their dividend or share of the profits in the form of shares in the capital of the farm. These shares would be entitled to interest at the rate prevailing (*e. g.*, 5 $\frac{1}{2}$ per cent.) and settlers would also be allowed to invest their other capital in the farm at the same rate. When settlers holdings such capital left the farm, or on death, the capital would be repaid."

Each settler on the Patrington Colony was required to serve a probationary period before commencing to share in the profits. In March, 1920, 63 ex-Service men were stated to be working on the estate, of whom 37 had completed their probationary period and were, therefore, entitled to share in the profits. Thirty-six new cottages had been built.

The Holbeach Colony was established on an estate of 1,000 acres at Holbeach Marsh, in Lincolnshire, acquired from the Crown on a lease of 99 years at a rental of £1,623 per annum. Possession of the land was obtained on 11 October 1917.

This estate was intended for the market garden type of colony, for which it was well adapted both in respect of soil and situation. It was proposed to divide the estate into holdings of 5 acres, to be afterwards increased to 10 acres. In March last, 75 small holdings had been let to ex-Service men and other seven men were working on probation on the central farm; 56 new cottages had been completed and were occupied by settlers and their families. The small holders had already formed a co-operative society.

The Heath Hill colony is in Shropshire, on an estate of about 1,150 acres purchased from the owner for £40,000. Possession was obtained at Lady Day 1918. The land is suitable for dairying and market gardening and it is estimated that it will provide about 40 small holders. At Lady Day 1919, sixteen ex-Service men, having completed their period of probationary training, entered on the occupation of small holdings ranging from 7 to 30 acres. Eighteen cottages have been built and certain existing houses have been altered.

The Pembrey Colony was formed on an estate of 1,345 acres at Pembrey, in Carmarthenshire, purchased by the Board of Agriculture for £30,000. It will probably provide about 60 small holdings.

The only colony established on land presented to the Board of Agriculture is at Bosbury, in Herefordshire. The estate is of about 300 acres and has been specially set apart for ex-officers. In March last, small hold-

ings had been provided for seven ex-officers and two other ex-officers were working on the central farm.

At Rolleston, in Nottinghamshire, an estate of 2,769 acres was bought for £17,750. In March last, two army huts had been erected as bungalows for married men and their families, and 14 cottages were in course of erection.

The small holdings colony at Titchfield was quickly organized. Possession was only obtained on 29 September 1919, but by the following March, 78 ex-Service men had been provided with small holdings and 38 others were employed on the central farm or on estate work. The land is 1,355 acres in extent, and is situated in the strawberry-growing district of Hampshire, and the settlers are devoting themselves principally to the cultivation of this crop. A co-operative society has been formed.

An estate of 2,359 acres was acquired by the Board of Agriculture at Amesbury, in Wiltshire, for the sum of £7,500 plus a rent-charge of £1,375. The land is situated close to one of the largest military camps in England and the colony has, therefore, not only a fine market at its doors, but also liberal supplies of stable manure. It is being worked on the profit-sharing system. Two army huts have been erected for the accommodation of married settlers and in March 9 new cottages were nearly completed and 16 others were in course of erection.

At Berwick St. James, about six miles from the Amesbury colony, the Board of Agriculture have acquired another estate. It contains 1,520 acres and includes the village of Berwick St. James. This colony is also being worked on the profit-sharing system.

At Wantage, in Berkshire, an estate has been acquired and has been set apart for ex-officers and ex-land army women. In March 8 ex-officers were working on the profit-sharing system and 12 ex-land army women were also working on probation. The settlement is devoted to dairying.

An estate of 6,542 acres at Sutton Bridge, in Lincolnshire, has also been purchased. It is practically all arable land, alluvial in character, and of a most fertile nature eminently suitable for intensive cultivation and capable of producing heavy crops of potatoes, fruit and other market garden products. It will be divided into small holdings. Possession of part of the land was obtained in April last.

At Wainfleet, also in Lincolnshire, an estate of 1,778 acres has been purchased. It will provide about 30 small holdings of from 30 to 40 acres, suitable for mixed farming, portion being retained for a central farm. About 250 acres came into hand at Lady Day and possession of the remainder will be obtained at Michaelmas.

The total number of ex-Service men who had been received at the settlements up to March last was 536. Of these, 84 had left on account of ill-health or for other reasons, leaving 452 at the settlements. This number was made up of 271 settlers, 107 probationers and 74 other ex-Service men working as wage-earners.

Of the settlers, 200 had been provided with small holdings compris-

ing in all 1,971 acres, and 71 were men working on profit-sharing farms who had completed their probationary period of six months. In addition 13 ex-land army women had been settled (12 at Wantage and one at Pembrey).

§ 4. PROVISION OF SMALL HOLDINGS BY COUNTY COUNCILS.

Concurrently with the establishment of State colonies by the Board of Agriculture, the county councils continued to create small holdings under the Small Holdings and Allotments Act, giving preference to the applications of ex-Service men and women.

We have seen how the Land Settlement (Facilities) Act, 1919, gave greater facilities to the county councils in the acquisition of land. In view of the imperative necessity of reducing State expenditure, however, the Board of Agriculture urged the councils not to purchase for cash any large part of the land they might acquire. The alternatives are hiring land, by agreement or compulsorily, and purchasing for perpetual annuities. The Board recommended that before compulsory hiring was resorted to, a council should offer to buy the land for a perpetual annuity. If such offers were refused no reasonable objection could be raised to the use on an extensive scale of the compulsory hiring powers. Even in cases where new equipment was necessary, the Board recommended that councils should merely purchase a small area of land on which houses and buildings might be erected and obtain the remainder of the land required for the settlers on lease.

According to an official statement published by the Board of Agriculture, the county councils had received, up to 5 February 1920, 25,905 applications from ex-Service men for small holdings of a total area of 450,603 acres. Of these applications, 16,017 had been approved for a total area of 269,025 acres. Councils had actually acquired or agreed to acquire 162,247 acres, and in addition they had under considerations 75,000 acres, the bulk of which, it was hoped, would be acquired at an early date. Of this area, it was proposed to acquire 11,620 acres by the exercise of the compulsory powers which the county councils possess for the acquisition of land.

Up to the date mentioned, 4,250 men had actually been provided with holdings, on a total area of 59,136 acres.

A form of holding for which a considerable demand has arisen is the so-called "cottage holding," that is a cottage together with a small area of land, not less than one acre in extent, which men who depend mainly on employment for wages can partly cultivate and partly use for fruit-growing or for keeping pigs and poultry or (if the area permits) a cow. Special inquiries made by a Commissioner of the Board of Agriculture amongst the troops in France indicated that the number of men who desired such holdings was much larger than the number of men who desired to obtain holdings of sufficient size to provide them with a livelihood.

Special attention was devoted to this type of holding by the Essex County Council and a memorandum prepared by this council was circu-

lated amongst the other county councils by the Board of Agriculture early in 1919, with the strong recommendation that they should proceed at once to the acquisition of small areas of land for the provision of cottage holdings.

"It is suggested," said the Memorandum of the Essex County Council, "that a sufficient number of cottages should be built in each village and that each should have from $1\frac{1}{2}$ to 2 acres of land attached. A cowshed and pigsty should also be provided. Each intending small holder should have a certain amount of capital—£25 to £40—and under a system of credit it is hoped that a similar amount might be advanced to him to supplement this capital. The money should be spent in the purchase of a cow, a pig, seeds, manure, etc. It is essential that the cow should be insured.

"The land should chiefly be devoted to growing winter feed for the cow. A common pasturage should in addition be provided at a fixed rent for grazing the cow during seven or eight months of the year. This pasture would be provided by the county council and might be managed by the parish council or some other local body who would receive the rent and superintend the upkeep of the land—draining, fencing, cutting thistles and, when necessary, muzzling.

"The occupier of the holding would work for wages and in his spare time cultivate his plot of land. It is important that horse cultivation should also be obtainable at reasonable times, and this could be arranged for by a system of co-operation possibly extending over several parishes.

"The care of the cow and pigs would devolve upon the small holder's wife or family, who would in this way become associated with the successful working of the holding."

The rents of all small holdings, whether self-sufficing or cottage holdings, are fixed at a rate which will repay the cost of acquiring the land and making it ready for use, except that the Government bears the extra cost due to the abnormal price of building. If a small holder wishes to buy his holding from the county council, he can do so by paying one-fifth of the cost of the land and its equipment in cash, and the balance by half-yearly instalments spread over a period of 50 years.

§ 5. TRAINING OF EX-OFFICERS AS FARMERS

AND FOR AGRICULTURAL POSTS.

We have seen that in the State colonies provision has been made for training intending settlers before they are allowed to take up small holdings. Those who desire to obtain self-sufficing small holdings from county councils are encouraged to gain experience by working for wages on the land or by taking cottage holdings. Special provision has, however, been made for the training of ex-officers who desire to become farmers or to obtain salaried agricultural posts.

In December 1918 the Board of Agriculture framed a scheme whereby allowances of £125 per annum for two years might be granted to a considerable number of officers who wished to farm on their own account on completion of their training so as to enable them to obtain practical agricultural experience and training with selected farmers. For officers married before the date of the armistice, additional allowances might be made of £24 per annum for each child up to and including the age of 15 years, but the maximum payment under this head was limited to £96 per annum for any one officer. Subsequently a further allowance of £25 per annum was authorized to be made to married officers and the proviso that he must have been married before the date of the armistice was waived.

In the same scheme, it was provided that scholarships of varying values up to £175 per annum and fees, for three years, should be given to a small number of officers (afterwards fixed as 100) who had had either previous experience of farming or a scientific education. These scholarships were to be held at an approved University or Agricultural College in England or Wales and were intended for candidates who might wish to obtain salaried posts. The same additional allowances were to be made to married officers as in the case of those in training to be farmers.

The local administration of the scheme was entrusted to Sub-committees of the County Agricultural Education Committees.

Advantage was at once freely taken of the scheme. By August 1919 over 1,000 ex-officers were actually in training at farms and 65 of the scholarships had been awarded.

§ 6. TRAINING OF EX-SERVICE MEN AS AGRICULTURAL LABOURERS.

In March 1919 the Board of Agriculture invited the County Agricultural Executive Committees, which had been formed during the war as part of the administrative machinery created with a view to increasing agricultural production, to take measures to train ex-Service men without previous experience in agriculture who desired to obtain employment on the land.

The Board stated that they proposed to set up training centres in various parts of the country, each centre to serve one or more counties. They asked the Agricultural Executive Committees to assist them in establishing such centres and to take over the management of the centres established in their respective counties.

The period of tuition was to be usually not more than six to eight weeks. During their training the men would be entitled to a sum of 30s. a week, less 17s. 6d. for the cost of board and lodging if they were accommodated and fed at the centre. Married men and men with dependants wholly dependent upon them might claim a subsistence allowance of 2s. 6d. per day while at the centre, if they were compelled to live away

from home, and men with dependants partially dependent upon them a subsistence allowance of rs. 6d. per day.

Seven days before a man in training completed his course, the principal of the training centre was to notify the Committee concerned, who would immediately make arrangements for placing the man in employment and for sending another ex-Service man to fill the vacancy at the training centre.

By August 1919 ten centres for giving instruction in general farm work had been established, with accommodation for 250 men, and 5 others, with accommodation for 132 men, were being established. Under the direct control of the Board of Agriculture was a centre for instruction in fruit and vegetable growing at Shippea Hill, near Lakenheath, Suffolk, with accommodation for 25 men. A school for the training of ex-Service men in tractor driving (as well as other farm work) had been established by the Board of Agriculture at Bois Hall, near Brentwood, Essex, but it was being closed.

Some Agricultural Executive Committees urged the adoption of the recommendation of the Committee appointed by the Ministry of Reconstruction, to the effect that farmers should be subsidized to enable them to take inexperienced men at full wages, but the Board of Agriculture set its face against this proposal, partly on account of the practical difficulties involved and partly on account of the objections which had been raised by labour organizations.

§ 7. TRAINING OF DISABLED OFFICERS AND MEN IN AGRICULTURE.

A certain number of disabled officers were trained in agriculture under the Royal Pensions Warrant. If an officer's disability is such as to prevent his returning to his pre-war occupation without being seriously handicapped physically or financially, he is considered to have a claim on the State to be trained in some other occupation. Where it can be shown by medical evidence that the officer must, on grounds of health, take up an outdoor occupation, there is practically no alternative to his being trained for an agricultural pursuit if he so desires. When the disability is such that the training must be carried out under continuous medical supervision, such "treatment training" has to be given in special institutions.

In September 1919 the Board of Agriculture took over from the Ministries of Labour and of Pensions the training in agriculture of disabled officers, except in so far as related to "treatment training." At that time there were about 150 disabled officers in training in agriculture and it was not anticipated that more than 300 others would be likely to apply for such training.

Disabled officers are trained either as "farm pupils" with individual farmers or market gardeners or (in exceptional cases) at agricultural col-

leges. Training allowances for a period not exceeding two years will be paid by the Board of Agriculture, together with training fees up to a maximum of £50 to cover the entire course of training.

The local administration of the scheme is delegated to the same sub-committees of the County Agricultural Education Committees which carry out the local administration of the Officers' Agricultural Training Scheme. There is this difference, however, that whereas in regard to the latter scheme, the principal duty of the sub-committees is the selection of candidates, there is practically no question of selection in regard to disabled officers. The chief functions of the Sub-Committees are to advise applicants whether they should, in their own interests, take up agricultural training, to put them in touch with suitable farmers or market gardeners and to supervise the training.

For disabled men, training centres have been established by County Agricultural Executive Committees under a scheme communicated to them by the Board of Agriculture in July 1919. The courses of instruction are of twelve months' duration and the scheme was expected to last for at least three years. Executive Committees are authorized to take land on agreement for a period of three years, and arrangements are made for housing men undergoing training by means of army huts or other temporary accommodation.

Difficulty was experienced in obtaining suitable land for the establishment of training centres and in October the Board wrote to the committees urging them to make renewed efforts. At the same time the Board wrote to the County Councils asking them to place at the disposal of the Agricultural Executive Committees farms or parts of farms acquired under the Land Settlement Scheme which it was not possible to let immediately as small holdings owing to the difficulty of providing equipment.

At this time it appeared that nearly 1,000 disabled men were awaiting training and it was anticipated that between 5,000 and 6,000 would shortly require to be provided for. The larger proportion of applications were received in most counties from men who desired training, not in farming proper, but in the lighter forms of cultivation, such as market gardening, fruit-growing and poultry-keeping.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

BELGIUM.

AGRICULTURAL RECONSTRUCTION IN FLANDERS. — SCHREIBER (Constant): *La restauration de la Flandre belge, œuvre du Ministère de l'Agriculture*, in *La Vie aux champs*. Paris, 10 May 1920.

M. Constant Schreiber, Director General at the Ministry of Agriculture, sums up as follows the work of agricultural reconstruction in Flanders.

"The war turned a large part of western Flanders into an absolute

desert, where, when the armistice was signed, there remained neither houses nor inhabitants, where even the arable soil had disappeared, dug down into the earth by the prolonged action of heavy artillery. There were no means of transport, or scarcely any. Prompt attention was needed, but it was impossible to provide travelling facilities in the district for the large staff which would have been necessary in order to obtain an exact idea of the situation. There were no authorities, official or otherwise, remaining in the district from whom one could obtain any information. A stay in these districts still presented various dangers which rendered the necessary intervention even more difficult. Finally, the absence of the owners, of whom nothing was known, not even the places where they had sought refuge, made it impossible to make with them the arrangements which must necessarily precede the intervention of public bodies in the work of reconstructing the land.

"It was in this chaos, of which the preceding remarks give but a feeble idea, that the administration to which was entrusted the work of agricultural reconstruction had to try to find some bases for prompt and prudent action, organized so as not to lose precious time, whilst avoiding the mistakes which are likely to be made in trying to solve a problem not all the factors of which are fully known.

"From the beginning, the Agricultural Reconstruction Office (*Office de la reconstruction agricole*) acted on the principle that the direct action of public bodies should be reduced to the absolutely indispensable minimum, and that it was above all necessary, by means adapted to the circumstances, to bring into being, stimulate, encourage and help private initiative. This would rapidly appear as a natural manifestation of the spirit of the country people, who are warmly attached to their native soil, which they left with deep regret compelled by forces which it was impossible to resist.

"Nothing could have been more unsuitable than an attempt to set up a government organization which would have taken the place of individuals in putting again under cultivation, by its own methods, the whole of the devastated land of Flanders. Kept away from their lands during the whole time necessary for the work of restoration, or taking part in it only in the capacity of an employee in the pay of a contractor, the former occupiers would have had to wait many years before they could again take up the normal cultivation of their land. Such a measure would have seriously checked the repopulation, not to speak of the settlement of the land, of devastated Flanders. The first pioneers who returned spontaneously to their old homes needed, above all, three things, so as to overcome the numerous difficulties which surrounded them, viz. houses, money and advice.

"It was not the business of the Ministry of Agriculture to attend to the housing question, the erection of shelters, whether temporary or permanent, being entrusted to King Albert's Fund and the Ministry of the Interior. The Ministry of Economic Affairs, again, deals with the compensation to be paid to the sufferers for the losses sustained by them

owing to the war. We shall see presently how the Agricultural Reconstruction Office has managed to procure resources for the farmers so as to enable them to begin the work of reconstruction.

"It was necessary, first of all, to put the inhabitants of the devastated districts in communication with the central administration which was set up to improve their condition. The first organization for this purpose was the Special Service for the Reconstruction of the Devastated Districts of Western Flanders (*Service spécial pour la reconstitution des régions dévastées de la Flandre Occidentale*). This service, which was established at La Panne before the armistice, was later on definitely housed in Bruges. It has charge of the technical part of all the work to be carried out by Government intervention. It has dealt with the distribution of domestic animals, machines, fertilizers and seeds, whether provided as reparation by Germany, or bought by the Government, or presented by philanthropic societies of friendly nations.

"Four State agricultural experts were subsequently appointed to act in the devastated districts.

"Finally the Department encouraged the formation of a large number of groups of farmers united into a federation with headquarters at Poperinghe.

"It is by means of these groups and their federation, with the collaboration and supervision of the State agricultural experts, that the Department of Agriculture organized in 1919 the agricultural reconstruction competitions, the aim of which was to procure for the most enterprising pioneers the means for cultivating part of the lands which they occupy. Thanks to these reconstruction competitions 15,000 hectares of devastated land were put under cultivation during 1919.

"Besides these competitions, the Department has started competitions for reconstructed allotments (*coin de terre restauré*) which assisted a number of workmen and small artisans to put under cultivation again the patch of ground on which they grew the vegetables for their homes, and on which they used to keep a goat or a sheep, a few rabbits or poultry.

"The prizes for these two competitions, which are awarded to the pioneers themselves and not necessarily to the landowners who have suffered by the war, have nothing to do with the compensation due to the landowners for war damages. The amount of these prizes varies according to the damage done to the land and the importance of the work undertaken in each case; the prizes can exceed 500 frs. per hectare only in very exceptional cases.

"Reconstruction competitions will be held as long as there is real merit in restoring devastated land, that is as long as conditions are particularly unfavourable to living and work in these districts.

"In spite of the good results of the reconstruction competitions up to now, they are not always sufficient to stimulate private initiative. As a matter of fact there are too many people who are willing to work, but who have not got the necessary means to live and work in the devastated districts.

" It is on account of this that the Minister of Agriculture has started the system of reconstruction contracts (*contrats de restauration*). According to these contracts the State guarantees to those farmers who undertake to cultivate lands remuneration equivalent to the profit that a farmer would make by cultivating an equal area of non-devastated land. In these contracts, in which the owner necessarily has part when it deals with land let by him to the pioneer, it is stipulated that the pioneer shall occupy the land for twelve years and that he shall farm it in the usual manner as soon as it is possible; the work of reconstruction must not under any circumstances take more than four years. It is hoped that not only will the land put under cultivation owing to these contracts be levelled so as to make it workable by agricultural implements, but that the further work done to it by the pioneer farmers will restore to it its original value long before the expiration of the twelve years of the contract.

" It seems probable that, in spite of all the measures taken to encourage individuals to undertake the reconstruction of the devastated areas, a certain part of these would remain deserted unless public bodies intervene directly so as to carry out the work which private enterprise would refuse to undertake. It is on account of this that the Ministry brought forward a law which was passed by the Chambers on 15 November 1919.

" The object of this law is to allow the State to restore, by its own means, land deserted by its owners. It gives the owners the choice of definitely transferring their lands to the State, or of allowing them to be temporarily requisitioned. In either case the State will cause the reconstruction of such lands to be undertaken by contractors in its service. The State will take advantage of this opportunity to carry out, on such lands, under the provisions of this law, the consolidation of small parcels of land, rectification of roads and watercourses and such other work of public interest the carrying out of which is extremely difficult, if not impossible, under ordinary circumstances.

" The carrying out of the Law of 15 November 1919, and the other measures mentioned above are the principal means taken by the Ministry of Agriculture for the reconstruction of the land.

" The Agricultural Reconstruction Office often intervenes on behalf of the population of the devastated districts. It has systematically organized the destruction of the rats which infested the zone of military operations and the adjoining country. It has made numerous analyses of soil which have enabled it to advise the farmers as to the necessary precautions to be taken for the cultivation of the land which has been inundated and saturated by sea water. In many places it has set up experiment stations for the study of the best methods of economic reconstruction. At present all the measures have been adopted which will reduce to a minimum the time necessary for devastated Flanders again to become one of the richest agricultural districts of the country."

BULGARIA.

SMALL AND LARGE LANDED PROPERTIES IN BULGARIA. — La propriété agricole en Bulgarie, in *L'Écho de Bulgarie*, Sofia, 24 August 1920.

The Statistical Office has published in N° 7-8 of its Monthly Bulletin of Statistics, data relating to the distribution of agricultural property. These data were collected by an inquiry made in 1908, but they depict the present state of affairs fairly accurately.

The only alteration to be made is caused by the modifications which have taken place in the territory belonging to Bulgaria, that is the loss of the Dobrudja with its large agricultural properties.

Owners of agricultural land in Bulgaria number 638,796. The total area of the land which they possess amounts to 3,544,685 hectares, made up of 6,681,583 parcels.

The majority of the landowners are small proprietors, as follows:

Proprietors owning	less than $\frac{1}{2}$ hectare	62,409
»	» from $\frac{1}{2}$ to 1 »	57,011
»	» 1 to 3 hectares	166,185
»	» 3 to 5 »	116,262
Total . .		401,867

We see from the above that more than half the landowners own less than five hectares each.

If we now examine large properties, we find that large landowners, holding over 100 hectares, number 650, as follows:

Proprietors owning	N° of proprietors	Area of properties
from 100 to 200 hectares	440	59,488 hectares.
» 200 to 300 hectares	111	26,848 »
» 300 to 500 hectares	66	24,259 »
over 500 hectares	33	5,549 »
650		136,144 »

We must note that a large number of these big properties are no longer in Bulgarian territory, for, in the districts of Dobritch and Baltchick,

now separated from Bulgaria, there are 414 big land owners holding 85,962 hectares, as follows :

Proprietors owning	Nº of proprietors	Area of properties
from 100 to 200 hectares	281	37,494 hectares
» 200 to 300 hectares	72	17,368 »
» 300 to 500 hectares	40	14,573 »
over 500 hectares	21	16,527 »
	414	85,962 »

Consequently Bulgaria, today, possesses only 236 large landed properties of over 100 hectares in area.

In regard to medium-sized properties, 1,113 proprietors own from 50 to 100 hectares.

FRANCE.

THE NEW SCALE OF AGRICULTURAL WAGES IN THE MELUN DISTRICT. — BERKERICH (Abel) : Une échelle des salaires d'après le prix du blé, in *Journal d'Agriculture pratique*. Paris, 2 September, 1920.

An interesting formula for fixing wages according to the price of grain has been worked out by the Central Syndicate of the Agricultural Society of Melun.

This Society has decided that, from 15 July the wages of agricultural workers shall be fixed on the following lines :

A. Daily Wage for Present Working Hours.

1. Men employed on any sort of work, not receiving board or lodging or any other payment in kind shall receive 15 francs per day when the price of grain is 100 francs per quintal ; an increase or decrease of 50 centimes per day according to the rise or fall of 5 francs per quintal in the price of grain above or below the 100 francs per quintal.

This gives the following scale :

Price of grain per quintal	Daily wage
From 70 to 74 francs	12 fr.
» 75 » 79 »	12.50
» 80 » 84 »	13
» 85 » 89 »	13.50
» 90 » 94 »	14
» 95 » 99 »	14.50
» 100 » 104 »	15

2. Women employed on any sort of work, not receiving food or lodging, or any kind of benefit, shall receive 80 centimes per hour.

3. Tractor drivers and skilled mechanical workers not receiving board or lodging or any kind of benefit shall receive 2 francs per day more than the male farm workers.

B. Monthly Wage for Present Working Hours.

Carters and drovers, not receiving board or lodging or any kind of benefit shall receive 440 frs. per month when the price of grain is 100 francs per quintal; with an increase or decrease of 15 frs. per month according to the rise or fall of 5 frs. per quintal in the price of grain above or below the 100 frs. per quintal. The monthly wage will, therefore, be according to the following scale:

Price of grain per quintal		Monthly wage
From	to	
70	74 francs	350 fr.
"	75 " 79 "	365
"	80 " 84 "	380
"	85 " 89 "	395
"	90 " 94 "	410
"	95 " 99 "	425
"	100 " 104 "	440

There shall be an increase of 100 frs. for the harvest month (this increase shall cover Sunday and holiday work); the bonus for reaping or other harvest bonuses shall still be paid.

Beside this wage each worker shall be entitled to a garden of 5 ares in area, cultivated and manured at his employer's expense, and to a yearly indemnity of 100 francs after 1 year's service. This condition is applicable to all farm workers who have worked during a whole year on the farm and who have not been boarded. A sum equal to the value of any or all of the following benefits shall be deducted from the wages of workers in receipt of same: lodging, heating, lighting, board (either whole or in part) or any other payment in kind.

The wages fixed above are payable to all workers, of either sex, who are fit for and capable of all agricultural work. For workers, of either sex, who, owing to their age or health or their want of aptitude, are incapable of doing a normal day's work, the wages paid shall be based on the amount of their work.

Foreign workers shall be paid at the same rate as French workers. The same deductions shall be made if they receive lodging, heating, lighting, board, whole or in part, or any other benefit.

If the formula adopted by the Agricultural Society of Melun is incomplete, in that it does not take into account the various cultivations to the production of which the workmen contribute largely, it, however interests both employer and worker in the increase in prices and by combining the interest of both parties, it prepares for the participation of the workers in the fruits of their labour.

GREAT BRITAIN AND IRELAND.

THE FIXING OF FAIR RENTS IN IRELAND IN 1918-19. — Report of the Irish Land Commissioners for the Period from 1st April 1918, to 31st March, 1919. Dublin, 1920.

In the three tables which follow we give particulars regarding the fixing of fair rents in Ireland (1) for a first, second and third statutory term respectively. For the operations carried out during the year 1918-19 detailed particulars are given, but we only give total figures for the fixing of fair rents up to 31 March 1919 (2).

The number of applications to fix a fair rent for a first statutory term which were struck out, withdrawn or dismissed up to 31 March 1919 was 76,256; for a second statutory term 21,087; for a third statutory term, 363. The total number of cases disposed of up to 31 March 1919 was, therefore, 459,069 for a first statutory term; 165,096 for a second statutory term, and 6,250 for a third statutory term.

TABLE I — *Fair Rents fixed for a First Statutory Term.*

	Number of cases in which judicial rents have been fixed	Area in acres	Former rent	Judicial rent	Percentage of reduction(— or increase(+)
1918-19:					
Yearly Tenancies: Chief Commission and Sub-Commissions	51	2,254	777	709	— 8.8
Yearly Tenancies: Civil Bill Courts	12	120	112	122	+ 8.8
Redemption of Rent: Chief Commission and Sub-Commissions.	2	87	36	25	— 30.2
Agreements lodged with Land Commission	106	2,562	1,242	1,090	— 12.3
Total, First Statutory Term, 1918-19	171	5,023	2,167	1,946	
Total, First Statutory Term, up to 31 March 1919	382,813	11,385,375	7,540,428	5,982,054	— 20.7

(1) See article on "The Fair Rent Provisions of the Irish Land Acts," by A. P. Magill, in our issue of January 1914.

(2) For detailed particulars of the fixing of fair rents up to 31 March 1918 see our issue of November/December 1919, page 683

TABLE II. -- *Fair Rents fixed for a Second Statutory Term.*

	Number of cases in which judicial rents have been fixed	Area in acres	Rents of holdings prior to creation of first statutory term	Judicial rents fixed for a first statutory term	Judicial rents fixed for a second statutory term	Percentage of reduction in rents fixed for a second sta- tutory term on rents fixed for a first statutory term
			£	£	£	£
1918-19:						
Fixed by Chief Commis- sion and Sub-Commis- sions.	52	2,326	1,011	811	734	9.5
Fixed by Civil Bill Courts	5	172	125	100	80	19.9
Agreements lodged with the Land Commission	74	2,288	1,884	1,742	1,678	3.7
Total, Second Statutory Term, 1918-19.	131	4,786	3,020	2,653	2,492	6.4
Total, Second Statutory Term, up to 31 March 1919	144,009	4,434,640	3,246,357	2,583,599	2,084,850	19.3

TABLE III. — *Fair Rents fixed for a Third Statutory Term.*

	Number of cases in which judicial rents have been fixed	Area in acres	Rents of holdings prior to creation of first statu- tory term	Judicial rents fixed for a first statutory term	Judicial rents fixed for a second statutory term	Judicial rents fixed for a third statutory term	Percentage of reduction (—) or increase (+) in rents fixed for a third statutory term on rents fixed for a second statutory term
			£	£	£	£	
1918-19:							
Fixed by Chief Commission and Sub-Commission. . .	69	3,304	2,861	2,005	1,637	1,577	— 3.7
Fixed by Civil Bill Courts	20	342	374	308	232	233	+ 0.1
Agreements lodged with the Land Commission. . . .	44	1,305	—	745	586	558	— 4.8
Total Third Statutory Term, 1918-19.	133	4,951	(1) 3,235	3,058	2,455	2,368	— 3.1
Total, Third Statutory Term, up to 31 March 1919	5,887	191,103	(1) 130,487	125,981	98,042	89,069	— 9.2

(1) Not including rents of holdings for which agreements fixing fair rents were lodged.

RUSSIA.

AGRARIAN REFORMS OF GENERAL WRANGEL'S GOVERNMENT. — From a note by Prof. P. P. GROUSKY, published by the *Agence économique et financière*. Paris, 7 September, 1920.

General Wrangel announced on 8 April 1920 the principles which were to form the basis of the new regulations with regard to the land question. They are as follows:

"1. The whole area of land fit for cultivation must be utilized completely in the most suitable way;

"2. The land must be owned, by well established title, by the greatest possible number of people who can personally cultivate it;

"3. The State must act as intermediary between the large landowners and the new owners of the land."

These fundamental principles have been stated in the Regulations of 25 May 1920 on the "Transfer, by order of the Government, of property rights in land suitable for agriculture belonging to the State, the State Land Bank or to private individuals, to the farmers cultivating these lands."

The ownership of agricultural land, whether based on regular title, or acquired by seizure, is assured by the State to the present holders of it (Article 1 of the Regulations). The State wishes to legalize the passing of the land out of the possession of the original landowners into the hands of those who took it during the revolution and it entrusts to special administrative bodies, set up with this object, the Agrarian Councils of cantons and districts, the work "of seeing that the land cultivated by the peasants shall belong to them, of drawing up measures suitable for ensuring their permanent possession of such lands, of establishing a legal regime in regard to the land and of proceeding with the transfer of the land in small lots to the peasants who personally cultivate it and conferring upon them the ownership of such lots" (Art. 3).

The lots to be given to the peasants shall be taken from the land reserves composed of arable lands, meadows and pasture lands belonging to the State, to the Land Bank and to private owners, and, in the first instance they shall be taken from the leased land it being understood that those who receive the lots must pay to the State dues in kind (in the form of grain) or in cash (art. 3).

The following lands are not to be given in this manner to peasant owners: 1. "nadiel" land (lots given to peasants when serfdom was abolished); 2. land bought by peasants through the Land Bank according to the established regulations; 3. land previously distributed for the formation of farms according to the Law on Agrarian Organization; 4. lands belonging to the churches, monasteries and "vakoufs"; 5. lands occupied by houses, kitchen gardens, gardens or valuable cultivations; 6. lands occupied by mills, factories or workshops; 7. lands belonging to private owners who use them for agricultural production, these lands remaining

theirs to the maximum amount to be decided on by the government on the advice of the District Agrarian Councils (art. 3.).

This last exception is the most important seeing that the decision as to the maximum amount of land to be left in the hands of the original owners has been entrusted in each district to the District Council, on which will be represented fairly completely all the interests of all the local population. It is thought that the amount of land left to the original owner will not be very large, but will be of about the same extent as a good peasant farm.

A special order regulates the fate of soviet and communal farms. The communal farms are handed over to the agrarian councils of the cantons, which are chosen by election, and will have the power of either nominating managers to work them, or of distributing them among small landowners.

As for the soviet farms, which were managed by special soviet functionaries, according to the methods used on capitalistic farms, they will remain at disposal of the Government, which can hand them over to State management, or to the agrarian councils of the Canton, with the reservation that these lands can only be given to peasants on conditions assuring the continuance of the cultivation carried on.

The State definitely assures the ownership of lands to the *de facto* occupiers. Consequently where no understanding as to the transference of the ownership can be reached between the former land owners and those who are at present cultivating their lands, the State will act as intermediary and assign to the small farmers, in ownership, the land which they farm on condition of their paying to the State charges to be used for the amortization of their debts to private persons or to credit societies, or to be paid into special funds for the compensation of the former owners.

Since the State assures to the *de facto* occupiers the ownership of the land, the payment is made either in cash or in grain to the State Treasury by the new owner. The regulations allow of voluntary agreement between the former owners and the present occupiers, but such private agreements form no exception to the general rule, and usually all arrangements for acquiring the land are made between the State and the new owners.

The charges paid to the State by the new landowners are paid into a special Treasury fund intended to pay off mortgages to banks and private individuals and to compensate the former owners of lands handed over to new owners.

The price of each dessiatin of private land thus transferred is arrived at as follows: the district Zemstvo Councils determine, on the basis of Zemstvo statistics and of information supplied by the agrarian council of the canton, the average yield per dessiatin of winter cereals (rye or wheat) in each canton (*volost*). The price of each dessiatin is fixed on the basis of these data without taking into consideration the actual yield, even when the land is not cultivated.

The payment of the amount due by the new owner is made by 25 equal annual instalments, representing for each dessiatin one-fifth of the average annual yield per dessiatin. The new owner has the right to buy, before the term expires, the lands which he acquires as private property,

by paying the price in cash or in grain at the market rates current at the time the payment is made.

If the payments are not made at the due dates the agrarian council of the canton hands over to other persons the lots on which the payments are in arrears.

The agrarian councils of the cantons arrange for each property belonging to the State or to private owners a plan for the allotment and distribution of the lands amongst the new owners, except such part of the estate as is left to the original owner. The area of each lot must be sufficient to enable of the land to be profitably cultivated. The proposals of cantonal councils are communicated for their approval to the district agricultural councils, and, when once approved, they constitute the new owners' incontestable titles of possession until these titles are exchanged, on completion of the payment of the sums due to the State, for documents registering the absolute ownership.

As for the arrangement of the classes of new owners who are given preference in establishing their right to own land, the Regulations place in the first rank farmers living on the land or who possess the necessary implements, or who leased the land, and first amongst these are soldiers "who have fought for the principle of the National State" and their families. Further foreigners can only be granted land after the needs of the native population have been satisfied.

The organizations which are entrusted with carrying out this reform are the agrarian councils of the cantons, the agrarian district councils, the intermediary agents for government and district agrarian business and their deputies. We have already shown that the carrying out of a whole series of agrarian measures is in the hands of the cantonal and district councils. We must say a few words in regard to the organization of these councils.

The cantonal councils, which are the foundation of the reform, are elected, according to Article 3 of the Provisional Law on Agrarian Institutions of 25 May 1920, at special agrarian meetings of each canton, consisting of the following persons aged at least 25 years: (1) all the "elders" of the villages of the canton; (2) the elected representatives of the village agricultural societies and others in the proportion of one representative for each ten heads of families who are cultivators but not wage-earners; (3) land-owners in the proportion of one for each estate forming part of the canton; (4) one representative for each church or religious community (of any denomination) or school owning land in the canton and (5) representatives of the Treasury, of the State Land Bank, of towns, of zemstvos, of scientific or charitable societies, if they possess land in the canton.

In accordance with the most recent law, that of 28 July 1920, on cantonal zemstvos, the agrarian councils of the cantons are no longer elected at the cantonal meetings, but by meetings of the cantonal zemstvos which constitute the deliberative organs of cantonal self-government, elected from among householders and landed proprietors. In those cantons where

the agrarian councils were already elected the meetings of zemstvos have the power, if they think fit, to hold a new election.

The agrarian council of the canton is elected for one year from among the members of the cantonal meeting or among all the electors of the zemstvo of the canton, if the elections are made by the meetings of the cantonal zemstvo; it is composed of from five to ten members and their deputies.

Surveyors and other functionaries of the Ministry of Agriculture and Agrarian Organization can be added to the agrarian councils at the request of these councils.

The district agrarian councils are, on the contrary, not composed exclusively of elected members; the president of the district agrarian council is the representative of the Minister of Agriculture, the intermediary agent for agricultural matters in the district. The following also belong to the district agrarian council: the president of the executive office of the district zemstvo, the justice of the peace selected for this purpose by the congress of justices of the peace, representatives of the financial administration and cantonal representatives, elected in the proportion of one for each canton, by the meetings of zemstvos, under the same conditions as the members of the cantonal council.

Finally the general direction of the work of agrarian reform and the co-ordination of the efforts of the district and cantonal councils is in the hands of the intermediary agent for agricultural affairs, on whom are directly dependent the survey branch and the agrarian branch of the Department of Agriculture and Agrarian Organization of the Government.

In connection with the survey branch a special permanent survey council has been formed for the approval of survey plans and decisions; agrarian matters are decided by the agrarian branch.

The agrarian councils of the districts and cantons are responsible for carrying out agricultural laws. In fact these councils are entrusted with resolving the most important questions of agrarian reform. Such are, for example: the working out of the plans for dividing the land amongst its new owners; settling the area, in dessiatins, of the land to be held by the new owners, etc. The district agrarian councils must also assist the cantonal councils in their work and see that the working of the agrarian measures does not conflict with the laws and orders of the Government; the district councils settle complaints made before them against the cantonal councils and officials.

Such are the general principles of the two Agrarian Laws of 25 May 1920; the "Regulation on the transfer, by order of the Government, of property rights in land suitable for agriculture belonging to the State, the State Land Bank, and to private individuals, to farmers cultivating these lands" and the "Provisional Law on agrarian institutions." They aim at the creation of a class of small peasant proprietors at the expense of large and medium land owners.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Eighteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Carastna arpent (Hungary,	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho 50 ken (Japan,	=	119.30327	yards
1 Crown 100 Heller, Austria-Hungary)	=	10 d.	at par
1 Crown 100 (12 Denmark, Norway Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Declatine (2 towarwert, (Russia,	=	2.69966	acres
1 Dinar, gold (100 para, (Serbia)	=	933/64d.	at par
1 Dollar, gold (100 cents) (United States)	=	45.5/16d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64d	at par
1 Egyptian Kuntar	=	99.0498	lbs.
1 Feldan Mast. 2; Kira Kemei, (Egypt,	=	1.03805	acres
1 Florin, gold, or Guilder (100 cents, (Netherlands)	=	15.753/64d.	at par
1 Fran. 100 centimes, (France	=	933/64d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1193.613	yards
1 Kokou '10 To' (Japan,	=	1.58726	quarts
1 Lei, gold (100 bani, (Rumania)	=	983/64d.	at par
1 Leu (100 stivinki) (Bulgaria)	=	933/64d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4d.	at par
1 Mark (100 penni) (Finland)	=	933/64d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25.2 ¹¹ /64d.	at par
1 Milreis, gold (Portugal)	=	45.5 ¹⁰ /64d.	at par
1 Pesetas, gold 100 centimos (Spain)	=	933/64d	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire,	=	185.043/64d.	at par
1 Pund (Sweden,	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$ of £1 (gold)	
1 Talari (20 piastre) (Egypt)	=	45.1 1/32d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
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Part I: Co-operation and Association

GERMANY.

CO-OPERATIVE DAIRIES DURING THE WAR.

SOURCES:

JAHRBUCH DER REICHVERBÄNDLE DER DEUTSCHEN LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN FÜR 1914, 1915, 1916, 1917, UND 1918. Vols. 21, 22, 23, 24 and 25. Berlin, 1915, 1916, 1917, 1918 and 1919.

The economy of Germany, which previous to the war was intimately connected with the world economy, was compelled during the war period to adapt the various branches of its activity, according to their aims and their importance, to the exceptional circumstances of the moment. We shall endeavour to show the consequences of this process of adaptation to the milk industry and to the co-operative dairies connected with it.

§ I. GENERAL CONDITION OF CO-OPERATIVE DAIRIES DURING THE WAR.

With the continuance of the war and the constantly increasing restrictions on international trade, the importation of feeding-stuffs, so important in Germany in time of peace, was almost entirely stopped. The number of dairy cows and their yield diminished, and scarcity of milk was felt in many places. The cost of manufacturing milk products increased to an extraordinary extent, and was felt the more because the quantity of produce over which the expenses were spread was continually diminishing. The compulsory delivery of milk to co-operative dairies by individual farmers in many districts could not be enforced, and in consequence of the fixing of a maximum price, the butter made in the farms of private individuals was placed on a level with that of the co-operative dairies, so

that the individual farmer received for his butter, often of inferior quality, the same price as that paid to co-operative dairies for a superior article. While on the one hand this discouraged farmers from forming co-operative societies, on the other it deprived existing co-operative dairies of all possibility of development. Thus among the various forms of German agricultural co-operative societies, the co-operative dairies were the most severely injured by the war.

The number of newly formed societies showed a great diminution compared to those of the pre-war period. During the last five years of peace the following is the number of co-operative dairies formed :

TABLE I. — *Number of Co-operative Dairies Formed, 1909-10 to 1913-14.*

Year	Number of co-operative dairies formed
1909-10	134
1910-11	126
1911-12	114
1912-13	103
1913-14	93

On an average 100 societies per annum were formed. Even in 1914-15 this number fell to 50, of which 27 were formed in the ten months from 1 August 1914 to 31 May 1915 of the first financial year of the war. Then in the two following years 1916 and 1917 the number of societies formed fell to 20, but in 1918 it rose to that of the first year of war, 27. The number of societies dissolved in the same period was 29 in 1914-15 (including 26 in the ten months from 1 August 1914 to 31 May 1915), 13 in 1915-16, 20 in 1916-17 and 33 in 1917-18. Thus there is first an increase and then a clear diminution in the number of co-operative dairies, as shown by the following figures :

TABLE II. — *Increase and Diminution in the Number of Co-operative Dairies during the War.*

Year	Increase	Diminution
1914-15 (ten months).	1	—
1915-16	7	—
1916-17	—	—
1917-18	—	8

As will be seen, in each successive year of war the situation grows worse ; in the third year the number of co-operative dairies was stationary, and the fourth shows a fall, a result which occurred for the first time since 1890, the year from which the statistics of the National Federation date.

Table III shows the number of co-operative dairies during the last six years, as compared with the total number of all the co-operative agricultural societies.

TABLE III. — *Number of Co-operative Dairies compared with that of all the Co-operative Agricultural Societies.*

Year	Total number of co-operative agricultural societies	Number of co-operative dairies
1914	28,318	3,572
1915	28,555	3,594
1916	28,752	3,601
1917	29,082	3,601
1918	29,609	3,593

Thus the co-operative dairies represent about one eighth of all the agricultural co-operative societies, and slightly exceed in number the rural banks, which, as shown in our October number, rose in 1918 to 3,126.

As to liability the co-operative dairies are divided into three very unequal groups, as seen in Table IV.

TABLE IV. — *Division of Co-operative Dairies according to Liability, during the War Years.*

Years	Societies with unlimited liability		Societies with limited liability		Societies with liability to make unlimited supplementary payments	
	Number	Per cent.	Number	Per cent.	Number	Per cent.
1914	2,346	65.7	1,157	32.4	69	1.9
1915	2,354	65.5	1,170	32.6	69	1.9
1916	2,358	65.5	1,174	32.6	69	1.9
1917	2,356	65.4	1,174	32.6	70	1.9
1918	2,340	65.1	1,180	33.0	70	1.9

Thus nearly two-thirds of all the co-operative dairies choose the form of unlimited liability, though their number has slightly diminished during the war. Next comes the form of limited liability, comprising about one-third of all the societies, but steadily diminishing; then the last form, liability to make unlimited supplementary payments, the importance of which is relatively secondary, being 1.9 per cent., but is nevertheless somewhat greater than in other kinds of co-operative societies; in the credit societies and societies for purchase it represents scarcely 0.1 per cent.

Table V (page 757) shows how during the war the co-operative dairies were divided among the various territories.

TABLE V. — *Territorial Distribution of Co-operative Dairies
in the years from 1913-14 to 1917-18.*

States and territories	Number of co-operative dairies				
	On 1 June 1914	On 1 June 1915	On 1 June 1916	On 1 June 1917	On 1 June 1918
<i>Prussia:</i>					
East Prussia	70	70	76	77	76
West Prussia	128	128	127	127	126
Brandenburg	132	131	132	131	132
Pomerania	229	228	228	227	225
Posen	111	113	113	113	113
Silesia	112	113	112	113	116
Saxony	256	260	266	264	265
Schleswig-Holstein	281	286	289	290	291
Hanover	352	350	348	348	348
Westphalia	106	106	106	105	101
Hesse-Nassau	44	44	44	44	42
Rhine Province	210	205	202	201	198
Hohe Zollern	4	4	4	4	4
Total Prussia	2,051	2,050	2,047	2,044	2,034
<i>Bavaria:</i>					
Right bank of Rhine	550	562	565	567	565
Left bank of Rhine (Palatin- ate)	2	4	4		6
Total Bavaria	552	566	564	572	571
Saxony	25	25	25	24	19
Württemberg	361	367	375	378	378
Baden	102	106	106	107	108
Hesse	41	41	40	41	43
Mecklenburg-Schwerin	139	140	140	140	140
Mecklenburg-Strelitz	13	13	13	13	13
Saxe-Weimar-Eisenach	30	30	30	29	29
Culenburg	61	60	60	59	61
Brunswick	86	86	86	86	86
Saxe-Meiningen	7	6	6	6	6
Saxe-Altenburg	3	3	3	3	3
Saxe-Coburg-Gotha	2	3	3	3	3
Anhalt	14	14	14	14	14
Schwarzburg-Sondershausen . .	5	5	5	5	4
Schwarzburg-Rudolstadt . . .	1	1	1	1	1
Waldeck	12	12	12	12	12
Reuss (Elder Branch)	—	—	—	—	—
Reuss (Younger Branch)	2	2	2	2	2
Schaumburg-Lippe	2	2	2	2	2
Lippe	13	13	13	13	13
Lübeck	6	6	6	6	6
Bremen	3	3	3	2	3
Hamburg	12	12	12	11	11
Alsace-Lorraine	30	28	28	27	23
Total Germany	3,572	3,593	3,601	3,601	3,593

Apart from Prussia the co-operative dairies are most numerous in Bavaria which takes the first place with 552 societies in 1914, and 571 in 1918. Next come Württemberg with 361 and 378 societies respectively, Hanover with 352 and 348, Schleswig-Holstein with 281 and 291, and Saxony with 266 and 265. To Prussia belong about two thirds of all the co-operative dairies, to Bavaria about one sixth. Nearly half the total number of States possesses from 1 to 30 societies, and in one, the State of Reuss (Elder Branch) there is not one single society.

The figures which we shall now give, unlike those hitherto given, do not refer to the whole of the co-operative dairies, but include only those (the number of which however is considerable) which are to be found in the statistics of the National Federation. Table VI shows the importance of the federated societies which furnished returns.

TABLE VI. — *Number of Co-operative Dairies
affiliated to the National Federation and furnishing Annual Returns.*

Date	Total number of co-operative dairies	Number affiliated to the National Federation	Number which furnished returns	Percentage
1 June 1914	3,572	1,932	1,771	—
» » 1915	3,594	2,266	2,009	—
» » 1916	3,601	2,285	2,147	94.0
» » 1917	3,601	2,274	2,010	85.8
» » 1918	3,592	2,275	1,920	84.7

Thus two-thirds of the co-operative dairies belong to the National Federation, and the progress of their business enables us to draw some conclusions as to the position of co-operative dairies in general. The number of societies which have sent to the Federation a report of their work has fallen from 94 per cent. in 1916 to 84.7 per cent. ; still the number of reports, even in the last few years, is more than half the number of the co-operative dairies.

Of 2,133 co-operative dairies investigated in 1918 we have the following particulars : The oldest society dates from 1873, and was founded in East Prussia ; it has therefore been in existence for 45 years. Up to 1889, 154 dairies had been formed. From 1890 to 1899 they became more numerous wherever small holdings prevailed, as in Bavaria, Hesse and the Rhine province. Many new societies arose in the years 1902, 1903, 1904, 1906 and 1909. Many were formed, too, in the time immediately preceding the war in Bavaria, Württemberg, Baden and Schleswig-Holstein.

The members and other milk-suppliers share in the working of the co-operative dairies. During the last five years the number of members of

those societies which furnished returns to the National Federation was as follows :

TABLE VII. — *Membership of Co-operative Dairies.*

Year	Number of societies	Number of members
1914	1,771	189,814
1915	2,069	214,662
1916	2,147	226,394
1917	2,019	213,149
1918	1,926	202,310

The comparison between the numbers of members and of milk-suppliers for 12 federations in 1917 and 1918 gives the results shown in Table VIII.

TABLE VIII. — *Number of Members and of Milk-Suppliers in 1917 and 1918.*

Federations	Number of members		Number of milk-suppliers	
	1917	1918	1917	1918
East Prussia	851	1,003	354	539
Pomerania	12,332	12,405	5,125	8,890
Posen I	2,885	—	603	—
Silesia I	2,870	3,018	6	1,259
Saxony	—	1,205	—	395
Hanover	39,236	27,899	6,991	4,814
Westphalia	9,461	11,080	5,098	11,679
Rhine Province I	11,516	11,289	580	1,793
Bavaria	16,035	13,857	2,113	2,588
Saxony	—	29,214	—	3,194
Hesse	6,473	6,176	2,666	2,859
Mecklenburg	7,519	7,525	2,155	2,695
Oldenburg	11,431	10,414	3,315	3,824
Total	120,642	137,088	24,239	44,529

The increase observed in the number of milk-suppliers is due to the fact that it was made compulsory to supply milk to co-operative dairies.

No important deductions can, however, be made respecting the change in the proportion between members and milk-suppliers. It appears in general that the quantity contributed by non-members represents an amount much smaller than that which would result from comparing only the number of persons.

§ 2. LIABILITIES AND ASSETS OF CO-OPERATIVE DAIRIES.

Liabilities. — The statistics as to the financial basis of the co-operative dairies, their owned capital and capital drawn from other sources, has for them a special interest, because it is precisely the small property with slender capital for which the handling of milk on the co-operative system is important.

Owned Capital. — The great importance to co-operative societies of capital has appeared more clearly than ever of late years considering the extent of the new tasks devolving upon them owing to the war. The increase in general both of share and reserve capital, remarkable in other forms of co-operative society in consequence of the abundance of money during the war, which we had occasion to point out in articles published in our August, September and October numbers, was apparent in the case of the co-operative dairies. Table IX (page 762) indicates the amount of share and reserve capital during the war years.

As will be seen, the amount of share capital which during the first two years of war had slightly increased, diminished during the third and fourth years, and fell lower than it had been before the war, being 6,397,013 marks in 1914 and 6,146,319 marks in 1918. The increase in share capital was, among other things, checked by the low amount fixed for the shares, which for half the dairies was 10 marks and even less. But the reserves continually increased, rising from 16,197,732 marks in 1914 to 21,905,732 marks in 1918, an increase in round numbers of 5½ millions of marks. The greater part, both of share capital and reserve funds, belongs to the Federations of Saxony, Hanover, Pomerania, Rhine Province I, etc. Next come the Federations of Nassau, Rhine Province IV, Alsace-Lorraine, etc.

The total amount of owned capital, both share capital and reserve fund, reached the following sums during the years of war: — 1914: 22,594,949 marks (1,607 societies); 1915: 24,645,622 marks (2,002 societies); 1916: 27,088,604 marks (2,092 societies); 1917: 27,161,169 marks (1,984 societies); 1918: 28,051,737 marks (1,897 societies).

This continual increase of the owned capital is, as we have seen, exclusively due to the increase of the reserve funds of the co-operative dairies.

Borrowed Capital. — The working capital of the co-operative dairies furnished by outsiders comprises all the capital obtained by loan including

TABLE IX. *Share Capital and Reserve Funds of Co-operative Banks.*

Federations	1914			1915			1916			1917			1918		
	Share capital	Reserve funds	marks	Share capital	Reserve funds	marks	Share capital	Reserve funds	marks	Share capital	Reserve funds	marks	Share capital	Reserve funds	marks
East Prussia	225,242	238,547		205,250	208,592		216,312	200,510		280,753	311,260		294,813	379,667	
Brandenburg	135,008	607,000		141,201	705,106		111,700	738,655		143,507	827,708		116,139	882,279	
Pomerania	405,975	1,004,867		426,831	1,821,733		133,486	2,061,595		431,305	2,201,147		139,182	2,391,731	
Posen I	220,209	218,067		317,628	323,721		393,217	393,217		306,094	580,073		—	—	
Posen II	221,076	180,612		266,036	202,853		262,179	240,872		200,702	277,022		260,101	500,550	
Silesia I	258,385	952,501		277,036	1,017,990		269,611	1,001,738		251,637	1,142,016		280,100	1,218,760	
Silesia II	39,980	217,978		53,305	248,562		78,037	285,151		84,075	330,861		80,773	381,901	
Saxony	1,040,921	2,718,852		1,019,417	2,249,005		1,015,554	2,350,893		1,043,292	2,025,150		1,037,956	2,812,196	
Schleswig-Holstein	86,780	250,700		92,111	203,397		177,121	394,735		152,846	516,659		112,161	622,019	
Hanover	1,243,720	3,780,880		986,966	3,350,991		846,002	1,113,028		798,315	3,931,701		585,081	3,015,235	
Westphalia	371,238	1,146,707		217,485	849,295		296,901	1,064,135		267,883	1,057,922		426,300	1,606,619	
Kurland	121,362	102,861		136,238	306,625		111,633	323,988		140,508	352,886		141,112	372,903	
Nassau	21,520	22,031		19,500	12,481		21,410	20,071		1,200	12,621		2,370	28,853	
Rhinish Prussia I	491,347	1,261,633		398,213	1,273,108		403,027	1,338,727		406,495	1,396,215		405,170	1,473,656	
» II	—	—		110,807	817,432		131,215	1,072,502		—	—		122,966	1,322,815	
» III	—	—		—	—		4,473	22,684		5,000	17,748		—	—	
Kingdom of Bavaria	97,064	236,085		99,058	235,822		111,828	347,181		112,760	356,418		107,728	103,762	
» Saxony	502,365	354,303		512,985	402,626		535,595	446,083		526,665	462,487		542,370	177,043	
» Württemberg	51,603	307,646		220,308	1,631,706		230,831	1,730,467		242,053	1,961,192		226,237	2,012,812	
Grand Duchy of Baden I	353,106	629,000		51,897	333,426		68,370	336,843		44,465	304,866		51,774	362,256	
» » of Hesse	391,803	721,009		391,101	618,587		315,999	708,274		317,610	678,971		409,638	717,886	
» » of Mecklenburg	195,049	323,653		321,089	609,814		450,011	704,936		150,497	718,296		193,661	668,106	
» » of Oldenburg	21,320	34,629		199,057	338,418		217,477	345,531		224,166	409,201		216,992	433,976	
Alace-Lorraine	—	—		20,930	45,556		19,878	43,591		11,705	45,198		—	—	
Total	6,397,013	16,197,936		6,575,732	18,069,890		6,706,764	20,381,840		6,603,913	20,557,256		6,146,319	21,905,418	

the rights of the creditors of the societies. In it are included the sums received by co-operative societies from central and other co-operative societies, from members and from private persons, from banks and from public savings-banks, and also mortgage loans in so far as they are not included in any of these groups. The total amount of the borrowed capital during the war was as follows :

TABLE X. — *Borrowed Capital of the Co-operative Dairies.*

Years	Amount of borrowed capital — marks
1914	52,423,253
1915	56,808,751
1916	56,770,223
1917	54,698,583
1918	54,607,370

For co-operative dairies, as for other forms of co-operative society, the borrowed capital is much more important than the owned capital. The injurious consequences of this have been already described in other issues. The following statement shows the relative proportions between the two kinds of capital, expressed in percentages of the total capital.

TABLE XI. — *Relation between Owned and Borrowed Capital in the Co-operative Dairies.*

Years	Owned capital — %	Borrowed capital — %
1914	33.5	66.5
1915	31.0	69.0
1916	32.3	67.7
1917	33.2	66.8
1918	33.9	66.1

During the war years a more favourable proportion was observed between the owned and the borrowed capital but to a very small extent.

The total amount of the working capital of the co-operative dairies is as follows :

TABLE XII. — *Total Working Capital of the Co-operative Dairies.*

Years	Number of co-operative societies	Total amount of liabilities — marks
1914	1,771	75,018,202
1915	2,069	81,454,373
1916	2,147	83,858,827
1917	2,019	81,859,752
1918	1,926	82,659,107

In the fourth year of the war the working capital exceeded by rather more than a million of marks that of 1915 ; but at the same time it shows a diminution of a nearly equal sum with regard to the second year.

Assets. — The amount of the working capital of the co-operative dairies during the war years (value of real property, machinery, raw materials, amount of shares in the central banks, etc.) is shown in the following statement :

TABLE XIII. — *Total Assets of Co-operative Dairies.*

Years —	Number of societies —	Total assets — marks
1914	1,771	79,967,371
1915	2,069	86,585,207
1916	2,147	83,433,684
1917	2,019	85,016,925
1918	1,926	85,602,717

The increase during the second year of the war was followed by a remarkable diminution in the third and fourth years, amounting to three millions in round numbers. As the number of dairies which send in the figures of their assets and liabilities varies from year to year, it is very difficult to compare their financial conditions.

S 3.

A more exact idea of the condition of the co-operative dairies may be formed from the examination of single features of their work, rather than from the movement of capital, which during the war was subject to considerable oscillation. We must, however, bear in mind that for this we have very incomplete data.

The extension of co-operative dairies is in general closely connected with the distribution of landed property in various parts of the country. On the great estates of the eastern provinces of Prussia large dairies prevail, while in the districts of small holdings, for instance Rhenish Prussia I, Bavaria, Württemberg and Baden the societies have but a small sphere of work.

In densely populated territories, again, large dairies are formed, but in general the development of the dairies is in proportion to the participation in them of small agricultural holdings, so that a numerical increase of small dairies may be observed. The proportion between dairies which receive more than 1 million litres and those which receive less than 1 million litres has tended in favour of the smaller societies since 1890 when small holdings began to take an increasing share in co-operative organisations. An instance of this is the Federation of Stuttgart, with co-operative dairies

for the most part small, which in 1914 for the first time furnished data to the statistics of the National Federation.

Table XIV shows this tendency during the last nine years.

TABLE XIV. — *Quantity of Milk received annually by Co-operative Societies which furnished Returns.*

Years	Number of co-operative dairies which received less than 1,000,000 litres (or kg) of milk per annum						Number of co-operative dairies which received more than 1,000,000 litres (or kg) of milk per annum					
	less than 100,000	from 100,000 to 250,000	from 250,000 to 500,000	from 500,000 to 750,000	from 750,000 to 1,000,000	Percentage of total number of dairies	1 to 2 mil-lions	from 2 to 3 mil-lions	from 3 to 4 mil-lions	from 4 to 5 mil-lions	more than 5 mil-lions	Percentage of total number of dairies
	100,000	250,000	500,000	750,000	1,000,000							
	100,000	250,000	500,000	750,000	1,000,000							
1910	51	156	265	226	198	49.5	535	209	68	39	18	50.5
1911	43	203	278	236	207	52.3	527	218	76	45	26	47.7
1912	82	221	287	229	206	53.0	546	226	69	37	27	47.0
1913	80	194	249	212	180	54.8	451	164	73	36	28	45.2
1914	52	179	27	185	192	53.7	442	172	72	43	18	46.3
1915	27	355	339	212	172	60.8	432	167	69	36	31	39.2
1916	76	329	375	298	172	66.3	410	120	45	19	21	33.7
1917	114	319	356	229	185	70.5	347	70	39	13	14	29.5
1918	106	320	346	260	191	73.1	322	67	35	13	11	26.9

Thus in 1910 the co-operative societies with a supply of more than one million litres of milk per annum were 50.5 per cent., those with a smaller supply 49.5 per cent., and these two groups were of nearly equal numerical importance. But in 1918 the proportion of smaller societies had already risen to 73.1 per cent. of the whole, and that of the larger societies had fallen to 26.9 per cent.

Statistics are not available as to the number of dairy cows belonging to members or to other farmers who supply milk to the co-operative dairies. It is certain that during the war there was a diminution, for the census of cattle for 1915 showed in comparison with that of 1914 a falling off in the number of dairy cows of 3.1 per cent., that is, from 11,320,992 on 1 December 1914 to 10,970,009 on 1 December 1915 (1).

Table XV shows the number of cows possessed by all the members and milk-suppliers of the co-operative dairies which sent in returns on the subject during the war years.

(1) See the *International Crop Report and Agricultural Statistics of the International Institute of Agriculture*, September 1916, page 560.

TABLE XV. — *Number of Cows owned by Milk Suppliers of the Co-operative Dairies belonging to the Various Federations which Furnished Returns on the Subject during the War.*

Federations	Number of co-operative dairies for which the figures are available					Number of cows owned by members and milk-suppliers of these co-operative dairies				
	1914	1915	1916	1917	1918	1914	1915	1916	1917	1918
East Prussia	8	7	5	13	14	10,555	6,004	7,171	14,906	15,950
Pomerania	—	—	137	—	—	—	—	119,300	—	—
Posen I.	15	13	18	21	—	10,635	10,002	13,484	16,397	—
Silesia	—	—	—	9	18	—	—	—	6,775	20,139
Schleswig-Holstein . .	73	53	—	—	—	32,874	20,548	—	—	—
Hanover	39	48	70	79	47	36,705	30,401	54,534	67,618	44,079
Westphalia	32	18	16	29	41	29,090	17,449	14,788	25,179	46,406
Rhenish Prussia I(Bonn)	50	38	40	46	38	21,598	17,158	22,926	23,773	18,976
Bavaria	161	—	153	139	124	44,746	—	40,436	41,214	37,764
Saxony	—	—	8	16	18	—	—	4,817	16,674	895
Wurtemberg	—	200	—	—	—	—	48,874	—	—	—
Baden	80	—	—	96	97	13,818	—	—	16,093	17,019
Hesse	13	—	8	8	6	12,901	—	8,700	10,516	7,997
Mecklenburg	108	102	109	112	111	67,393	64,803	67,651	69,186	66,350
Oldenburg	12	14	12	15	23	24,303	29,130	26,263	28,077	42,846
Total	597	488	591	565	537	304,678	244,370	380,070	336,408	318,421

Table XVI (pag. 767) gives the quantities of milk supplied to the co-operative dairies belonging to various federations. In these figures the cream is included with the milk.

It will be seen from Table XVI that in the first year of the war both the number of dairies that furnished particulars, and the amount of milk received by them rose considerably as compared with the year 1914, but immediately after, even in the second year, a diminution began which continued through the whole period of the war. In the fourth year the number of co-operative dairies which furnished returns almost reached that of 1914, but the quantity of milk supplied was much diminished, a third in round numbers, from 2,164,940,339 litres in 1914 to 1,348,399,386 litres in 1918. The utilization of milk according to co-operative systems was more extensively practised in the province of Saxony, in Hanover, Pomerania, etc., and least extensively in the Federations of Nassau, Kurhessen, Alsace-Lorraine, etc.

The average annual quantity per co-operative dairy of milk supplied, taking all the districts of the federations, is shown in Table XVII (page 768).

TABLE XVI. — *Quantity of Milk supplied annually to co-operative Dairies.*

Federations	1924		1925		1926		1927		1928	
	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres
East Prussia	18	37,845,003	14	32,737,852	17	21,607,534	19	35,718,012	22	34,889,871
Brandenburg	31	67,366,931	36	69,643,345	37	59,037,852	36	54,058,122	36	51,051,613
Pomerania	122	194,802,813	128	108,663,068	131	103,159,333	136	183,743,324	137	174,156,800
Posen I	26	44,593,690	30	49,740,259	30	39,408,627	37	36,706,590	—	—
Posen II	36	41,561,383	36	29,344,415	38	22,730,303	40	22,367,161	40	23,536,855
Silesia I	31	71,533,407	28	58,257,690	—	34,505,562	35	51,359,761	31	42,347,518
Silesia II	16	32,805,459	16	30,644,324	16	24,376,674	—	—	16	17,724,648
Province of Saxony	269	324,980,249	271	341,417,842	270	261,491,024	272	224,507,623	270	190,477,208
Schleswig-Holstein	91	93,725,281	64	70,688,252	95	78,103,939	99	76,957,621	97	61,802,385
Hanover	203	384,921,711	217	430,793,130	195	267,549,299	131	199,916,635	112	130,511,871
Westphalia	78	153,786,510	66	122,785,040	74	106,910,981	64	85,000,040	71	98,885,893
Kurhessen	15	17,052,076	13	15,027,389	11	13,268,936	14	10,839,804	15	11,448,527
Nassau	2	3,569,236	1	2,962,868	2	2,758,008	1	1,782,205	2	1,093,711
Rhenish Prussia I	93	80,238,236	85	79,754,192	80	93,459,601	77	52,702,251	71	52,885,161
Rhenish Prussia II	43	83,559,027	53	101,207,837	53	74,707,366	—	—	50	52,395,537
Bavaria	281	103,428,697	251	97,537,595	178	68,519,393	132	17,851,320	116	41,775,060
Kingdom of Saxony	18	52,811,270	18	55,376,314	18	42,806,130	17	31,643,854	17	21,872,299
Württemberg	—	—	323	94,151,480	324	95,421,511	127	87,753,378	312	68,701,162
Baden	94	17,647,633	94	18,586,296	97	15,705,985	99	12,316,791	95	13,206,856
Hesse	26	35,379,693	23	32,111,970	25	26,193,313	27	25,100,796	27	25,528,817
Mecklenburg	108	161,419,936	105	161,825,202	108	139,720,793	112	135,925,297	112	126,271,785
Oldenburg	31	136,968,524	31	139,068,675	32	123,044,105	31	105,204,038	26	85,689,357
Alsace-Lorraine	8	1,488,660	8	1,277,261	—	—	—	—	—	—
Rhenish Prussia (cheese-making)	11	23,694,732	—	—	—	—	—	—	—	—
Total	1,654	2,164,940,539	1,911	2,234,692,206	1,825	1,748,447,569	1,706	1,181,515,899	1,678	1,131,859,386

TABLE XVII. — *Average Annual Quantity of Milk per Co-operative Dairy for all the Federations.*

Years	Kilogrammes or litres
1914	1,308,972
1915	1,156,497
1916	958,053
1917	868,284
1918	803,695

Thus the average quantity of milk per co-operative society steadily diminished during the war, from year to year. While the greatest fall in the pre-war period was from 1903 to 1904, to the amount of 83,000 kilogrammes, it was 152,000 kilogrammes from 1914 to 1915, 198,000 from 1915 to 1916, 90,000 from 1916 to 1917, and 64,000 from 1917 to 1918. The effect of the war on the co-operative dairies is clearly evident from these figures.

The milk supplied to the co-operative dairies was the most part manufactured into butter and other products and only a very small quantity was sold as whole milk. But in the case of some federations, for instance those of Baden and the Kingdom of Saxony, the co-operative sale of milk was nearly half of the whole business transacted. In the districts of Posen I, Westphalia and Kurhessen nearly a quarter of the milk supplied was disposed of by direct sale. The milk not sold as such, except an inconsiderable quantity used for cheese-making and other purposes, was devoted to butter making. The data as to the quantity of milk employed in cheese-making are very incomplete, so that it is impossible to form a perfect idea of the extent of the cheese industry among the co-operative dairies, on the basis of the statistics available. But to present an approximate idea of the position of the cheese factories we give the figures contained in Table XVIII (page 769), with the names of the federations which supplied them.

As we have said, it is impossible to draw general conclusions from Table XVIII. It is nevertheless interesting to compare the quantities of milk used in cheese-making in the first and the fourth year of the war. It will be seen that in the fourth year the quantity used was almost double that of the first, while the number of societies had in the meantime slightly increased but only by about one-sixth. Other things remaining unchanged the hypothesis seems well founded that cheese-making, the most perfect form of utilizing milk from a technical point of view, was desirable during the war, even economically, in conformity with the radical change in the economic life of the country, and therefore its production was increased in the co-operative dairies.

For butter making the opposite is true, and the quantity diminished from year to year, as shown in Table XIX (page 770).

TABLE XVIII. — *Quantity of Milk used in Cheese-making in the Various Federations.*

Federations	1914		1915		1916		1917		1918	
	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres	Number of dairies	Kilogrammes or litres
East Prussia	5	462,873	3	105,609	5	92,129	6	498,432	10	286,648
Brandenburg	1	794,358	—	—	1	159,942	1	40,673	1	37,320
Pomerania	14	2,672,155	12	2,035,482	16	1,291,861	10	187,666	9	411,022
Posen I.	7	1,735,527	7	102,165	7	106,843	7	71,704	—	—
Breslau II.	3	90,573	1	19,340	—	—	9	55,587	5	30,322
Province of Saxony	4	77,163	4	36,712	4	69,155	8	151,508	9	95,024
Schleswig-Holstein	8	3,660,489	6	1,799,578	—	—	—	—	—	—
Hanover	8	373,497	8	133,163	8	126,070	2	8,880	2	159,983
Westphalia	6	611,827	5	531,214	5	40,660	4	36,209	4	12,241
Kurbessen	2	25,460	1	22,743	5	41,615	—	—	—	—
Rhine Province I.	—	563,735	2	43,853	1	68,085	3	51,160	1	12,905
Rhine Province II.	—	—	—	—	15	21,411,620	—	—	10	5,716,969
Bavaria	3	968,900	7	79,400	13	3,299,105	6	1,144,915	11	1,910,475
Kingdom of Saxony	—	—	—	—	6	194,259	4	503,903	5	478,026
Baden	67	25,460	—	—	—	—	—	—	—	—
Hesse	4	97,621	5	173,113	4	267,555	6	392,316	3	193,215
Mecklenburg	4	93,805	4	61,726	1	1,607	1	53,580	1	557,805
Oldenburg	1	26,260	1	23,000	2	93,818	1	2,210	—	—
Total	137	12,276,708	66	5,512,998	93	27,264,354	68	3,198,833	77	10,292,955

TABLE XIX. - Quantity of Butter produced in the Various Federations, and the Average Amount produced per Co-operative Dairy.

Federations	1914			1915			1916			1917			1918		
	Number of dairies	Quantity of butter kg.	Average per dairy	Number of dairies	Quantity of butter kg.	Average per dairy	Number of dairies	Quantity of butter kg.	Average per dairy	Number of dairies	Quantity of butter kg.	Average per dairy	Number of dairies	Quantity of butter kg.	Average per dairy
Rast Prussia	18	1,953,424	100,079	12	1,497,775	124,815	14	802,563	61,612	16	998,527	61,158	10	903,001	90,300
Brandenburg	31	1,931,684	56,814	30	2,020,585	55,177	37	1,081,107	44,443	35	1,502,152	43,199	34	1,277,612	41,101
Pomerania	136	7,553,206	50,946	133	7,431,355	55,875	136	6,188,331	45,407	136	5,899,845	43,381	137	6,676,814	41,437
Posen	20	2,686,031	134,302	23	1,683,632	73,188	24	1,011,238	42,176	32	912,872	28,527	—	—	—
II.	34	2,959,458	85,866	34	2,507,608	76,507	35	1,352,569	38,931	38	1,444,435	37,485	39	1,113,306	36,300
Silesia I.	31	2,237,274	72,815	25	1,985,981	79,439	18	1,006,816	55,934	33	1,344,139	40,744	27	1,355,104	50,179
II.	16	1,081,033	67,565	16	1,119,543	69,965	16	600,537	37,009	—	—	—	16	581,100	36,306
Province of Saxony	267	10,759,725	40,200	264	11,296,073	42,761	270	8,472,161	31,119	269	7,390,761	27,173	268	6,368,490	23,763
Schleswig-Holstein	77	1,877,707	37,373	63	2,393,641	37,904	85	2,818,034	33,153	94	2,570,104	27,312	95	2,196,376	23,057
Hanover	108	8,753,316	80,700	162	13,002,162	83,958	125	8,393,827	67,151	114	6,083,259	53,257	67	4,020,610	60,009
Westphalia	73	4,051,617	55,502	60	2,994,542	49,909	66	2,801,886	42,449	59	2,092,112	35,466	69	2,713,842	39,531
Kurland	13	331,055	40,850	12	490,431	41,619	11	347,993	31,636	13	322,856	24,835	14	393,400	28,100
Nassau	2	18,060	9,030	1	5,089	5,089	2	26,405	13,203	1	1,726	1,726	1	1,202	1,202
Rhenish Prussia I.	92	2,897,015	28,229	83	2,802,517	33,765	75	1,804,374	25,258	70	1,732,570	24,751	81	1,537,495	18,981
II.	41	2,040,227	40,762	52	2,131,869	40,998	53	1,442,277	27,224	—	—	—	50	1,159,666	23,194
Bavaria	66	1,083,683	16,419	56	1,079,805	18,369	68	1,744,171	25,649	47	615,666	13,099	41	455,399	10,350
Saxony	16	1,354,699	84,669	17	1,470,812	86,518	16	612,215	38,263	16	591,709	35,107	17	484,871	28,757
Wurttemberg	—	—	—	315	3,201,652	10,164	304	3,265,852	10,743	286	2,861,626	10,006	266	2,257,115	8,165
Baden	68	370,001	5,441	64	312,811	5,573	54	267,131	4,947	47	199,350	4,241	45	295,666	6,563
Hesse	15	1,152,500	76,839	10	1,098,593	57,821	17	842,588	49,564	23	843,867	36,690	17	748,908	41,053
Mecklenburg	106	5,867,950	55,358	106	6,065,459	57,221	108	4,619,955	42,780	112	4,450,500	39,737	110	3,903,955	35,491
Oldenburg	—	7,908,458	—	—	7,939,753	28,565	28	4,217,801	150,696	27	4,392,971	162,703	25	3,251,801	130,052
Rhenish Prussia (cheese-making)	11	145,755	13,250	—	—	—	—	—	—	—	—	—	—	—	—
Total	1,234	69,876,068	56,625	1,581	76,232,608	48,217	1,562	54,477,474	34,877	1,468	47,091,247	32,079	1,411	41,566,847	28,704

The constant falling off in the amount of butter produced, which during the last years of peace was caused by the want of fodder, and the increased sale of fresh milk, was intensified in the war period in consequence of altered circumstances. The quantity of butter diminished from year to year both absolutely and relatively. In the fourth year of the war, during which the number of co-operative dairies which furnished returns respecting their production of butter, exceeded by 200 that of the last year of peace, the production of butter was less by 28 millions of kilogrammes, or one third, as compared with the last year of peace, and the average production per dairy fell at the same time from 56,625 to 28,704 kilogrammes, about half the pre-war average. With such a remarkable and continuous decline in butter-making, not compensated either by cheese making or the sale of fresh milk, the prospects of the co-operative dairies are not particularly encouraging.

§ 4. FINANCIAL RESULTS OF CO-OPERATIVE DAIRIES.

Though the data which illustrate the financial position of the co-operative dairies can by no means be considered complete, yet we furnish them because in connection with what we have hitherto stated, they may be useful in aiding us to form an opinion on the position of co-operative dairies. Table XX shows the profits and losses, and the excess of assets over liabilities, or of liabilities over assets, during the war years.

TABLE XX. — *Profits and Losses of Co-operative Dairies.*

Years	Number of dairies making neither profit nor loss	Profits			Losses		
		Number of dairies making profits	Amount of profits	Average profits per dairy	Number of dairies making losses	Amount of losses	Average loss per dairy
			marks	marks		marks	marks
1914	422	1,073	4,566,091	4,256	202	523,424	2,592
1915	405	958	3,655,823	3,764	203	447,524	2,209
1916	425	1,451	5,223,832	3,600	271	648,975	2,395
1917	406	1,070	3,378,419	3,157	198	472,768	2,388
1918	234	1,246	3,143,906	2,523	301	481,158	1,995

Owing to the variation in the number of co-operative dairies taken into consideration in the different years, no general conclusion can be drawn from Table XX. But it is remarkable that while the average loss per society remains during the war years almost at the same figure except for certain oscillations, yet the average profit per dairy shows a strong and uninterrupted downward tendency, diminishing from 4,256 marks in 1914 to 2,523 marks in 1918, the last year of the war.

To sum up, we may state that the co-operative dairies, through the retrograde movement of the entire milk production of the country, and the remarkable reduction of the quantity of milk supplied, have suffered very seriously during the war, and were placed in a very difficult position, in fact passed through an economic crisis. We shall have occasion to explain in future issues how and by what means this crisis was overcome.

MISCELLANEOUS INFORMATION RELATING OF CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

FRANCE.

1. THE DEVELOPMENT OF CO-OPERATIVE DISTRIBUTIVE SOCIETIES IN COUNTRY DISTRICTS. — *L'action coopérative*. Paris, 2 octobre, 1920.

The National Federation of Co-operative Distributive Societies, which has recently held meetings at Strasburg, has decided to carry on actively the development of co-operative organization in country and agricultural districts and recommends the following means to this end :

(A) As far as district societies and federations are concerned :

(1) District societies should do their best to assist country consumers towards co-operative buying, either by setting up branches in rural centres, or by organizing services of motor lorries or messengers, or by other methods of organization suitable to local conditions. The rules of responsible management and interest in results already in operation in the stationary branches are equally applicable to the mobile branches.

(2) The establishment of country branches (stationary or mobile) should be followed as soon as possible by the establishment of country sections so that the country co-operators may be able effectively to take part, either directly or by delegates, in the whole administrative and educational life of co-operation :

(3) District societies must do their best to use local agricultural produce so as to do away with middlemen by means of the organization of co-operative exchanges. The district societies should keep the wholesale warehouses informed of any agricultural produce in excess of local needs.

(4) Country sections should be made use of, like the town ones... for the co-operative use of the people's savings, which will thus be assured not only of safe and remunerative investment, but will also be applied in satisfying the needs of the depositors under their own control.

(B) As regards the wholesale warehouse :

(1) In order that the district societies may develop in the country, it is indispensable that the wholesale warehouse should give special attention to the needs of country purchasers, and should organize itself so as to supply the district societies with the articles which satisfy these needs, taking into consideration the different tastes and habits of the various districts.

The wholesale warehouse should make a special effort to produce or

purchase co-operatively the manufactured articles most used in the country districts (woollen and cotton goods, millinery, mercery, clothes, shoes, sabots, hardware, etc.);

(2) As regards articles needed for agriculture, as distinguished from domestic requisites, such as seeds, fertilizers, agricultural implements and machinery and cattle feeds, the warehouse should be prepared to assist agricultural organizations in a spirit of co-operation and not of competition;

(3) The wholesale warehouse should also give preference in the purchase of its supplies to the organizations formed for the manufacture and sale of agricultural products, provided always that this is done in such manner as to be of advantage to both parties and that the general interest of the consumers is not sacrificed to the particular interest of any class of producers. By this concerted action they will eliminate commercial parasitism and perfect the selection, manufacture and distribution of agricultural products.

At the same time the wholesale warehouse should continue its efforts to promote farms directly dependent on co-operative societies taking into account the experience of foreign wholesale societies, especially those of England and Switzerland. These farms should be organized on the best technical lines and should insure to the workers employed on them proper living conditions and wages equal to the highest wages in the district. Prizes for economy and good returns should be given in forms appropriate to each class of worker.

(C) As regards the National Federation :

(1) The National Federation should avail itself of every opportunity arising out of its relations with agricultural organizations to explain to them the consumers' point of view and the conditions for effective collaboration in the interests of all parties :

(2) The Technical Bureau of the Federation should organize a permanent inquiry into the development of co-operative distribution in the country districts, also into the development of agricultural organizations for purchase and sale, and generally, into the economic relations between the towns and the country, and the relations between the rural household and mercantile economy on the one hand and co-operative economy on the other hand.

Since the National Federation is to present a special report to the next Congress on the results obtained by the application of the foregoing resolutions, we shall have occasion to refer again to the question.

2. RAILWAY COMPANIES AND THE DEVELOPMENT OF AGRICULTURAL CO-OPERATION. — *Bulletin mensuel de la Société centrale d'agriculture de la Savoie*. Chambéry, 15 September 1920.

The Paris-Lyon-Méditerranée Railway Company has just adopted the following measures in favour of the co-operative cheese factories of Savoy, of Haute-Savoie, of the Ain, of Jura and of Doubs. It will grant :

1. A subsidy of 2,000 francs to each of the first twelve co-operative cheese factories built during 1920 and 1921, having modern machinery and methods suited to producing first-class cheeses, in the departments of Savoy, Haute-Savoie, Ain, Jura and Doubs.

2. Within a limit of 10,000 francs, a subsidy of 50 % of the expenses incurred up to a maximum of 1,000 francs, to those co-operative cheese factories already working in the same departments and for the same period, which shall make such changes in their buildings and plant as will enable them to produce first-class cheeses.

The sums thus awarded shall be paid after the completion of the work of installation or improvement and after it has been examined by competent persons appointed by the company.

SWEDEN.

CO-OPERATIVE DAIRIES IN 1918. — SVERIGES OFFICIELLA STATISTIK: MEJERTHANTERING ÅR 1918 AV KUNGL. STATISTISKA CENTRALBYRÅN. Stockholm, 1920.

Since 1890 short statistics of dairy produce have appeared every five years in the "Publications of the Royal Ministry of Agriculture." These statistics have been considerably extended and modified since 1913. According to a Royal order anyone engaged in dairying must send in statistical returns of business every year. From these returns statistics must be compiled and published by the Central Statistical Office.

The dairies are divided into four different categories. The *co-operative dairies* are associations of milk producers for the utilization of their own milk and sometimes of milk supplied to them by other producers, as well as for the sale of dairy produce on behalf of the members. The *estate dairies* are those where the milk is produced either entirely or for the most part on farms belonging to the producer. The *milk-purchasing dairies* handle milk and cream which they buy from the producers. Between these two last categories are the *estate and milk-purchasing dairies*; these handle the milk produced in their own farms and, in still larger quantities, milk purchased from outside sources. The number of these different sorts of dairies, in town and country, amounted in 1918 to :

	Country	Town	Total
Co-operative dairies.	522	33	555
Estate dairies	257	1	258
Estate and milk-purchasing dairies	145	1	146
Purchasing dairies	493	43	536
Total 1918	1,417	78	1,495
» 1917	1,652	110	1,762
» 1916	1,587	111	1,698
» 1915	1,554	109	1,663
» 1914	1,521	106	1,627
» 1913	1,537	113	1,650

The number of suppliers of milk to the dairies amounted to 88,355, of whom 59,891 supplied milk to the co-operative dairies, and 28,464 supplied the other dairies. The staff of the dairies amounted to 4,450 individuals, comprising 1,917 men and 2,533 women.

The quantity and value of milk and cream supplied to the dairies is shown below :

	Milk		Cream	
	Weight (1000 kgs.)	Value (Crowns)	Weight (1000 kgs.)	Value (Crowns)
Co-operative dairies	370,024	99,709,403	1,278	1,642,879
Other dairies . . .	201,389	58,374,107	73	98.091
Total 1918	571,413	158,083,510	1,351	1,740,970
› 1917	931,998	165,305,579	1,384	1,806,555
› 1916	1,124,929	148,998,068	1,330	1,037,465
› 1915	1,066,586	122,247,065	1,227	910,414
› 1914	1,238,669	112,749,732	1,696	1,082,800
› 1913	1,274,108	111,669,123	3,198	2,235,523

The average price of milk was 26.9 öre per kg. in the co-operative dairies and 29.0 öre per kg. in the other dairies. The reason for the lower price in the co-operative dairies is that they often return the skim-milk and buttermilk to the suppliers, either free or at a very low price.

The quantity and value of the dairy produce for the year 1918 are shown in the table on page 775.

Whole milk is sold in much smaller proportions in co-operative dairies than in other dairies. Out of 1,000 kilogrammes of milk and cream received the co-operative dairies sell 237 kg. as milk and the other dairies 261.1 kg. There is also a marked difference in this regard between the country and town dairies. The latter often deal principally in milk and only sell a small proportion of it in other forms. The former are chiefly concerned with the manufacture of milk products.

The average sale price of skim-milk was 35 öre per kg. in the co-operative dairies and 33.7 öre in the other dairies. The difference between the price per kg. of whole milk received and that of the whole milk sold (i. e. the dairies' profit) was 8.1 öre in the co-operative dairies and 4.7 öre in other dairies.

Relatively much more butter has been made in the co-operative dairies than in the other ones: in the former it has amounted to 21.5 kg. of butter per 1,000 kg. of milk and cream received, in other dairies it has only amounted to 12.6 kg. of butter. In co-operative dairies it took, on an average, 25.7 kg. of whole milk to make 1 kg. of butter; in the other dairies it took 26.6 kg. of milk. In all about 276 millions of kilogrammes of whole milk have been used in butter making. The average price of a kilogramme of butter was 537 öre.

As regards cheese, the quantity produced was 3,790,383 kg. of full cream cheese, 1,413,615 kg. of half cream cheese and 147,836 kgs. of skim-

milk cheese. the respective prices being 316, 235 and 177 öre per kg. The co-operative dairies make 28 kg. of cheese per 1,000 kg. of milk and cream received, against 24.6 kg. made by the other dairies. The total amount of milk used in cheese-making amounted to about 51 million kg. of whole milk and 12 million kg of skim-milk.

Quantity and Value of the Produce of the Dairies in 1916.

	Co-operative Dairies		Other Dairies		Total Dairies	
	Weight (1,000 kg)	Value (1,000 crowns)	Weight (1,000 kg)	Value (1,000 crowns)	Weight (1,000 kg)	Value (1,000 crowns)
Whole milk sold	69,227	31,200	54,265	18,277	143,512	49,477
Cream sold	16,739	21,770	7,046	9,130	23,785	30,900
Butter	8,069	43,676	2,550	13,498	10,639	57,174
Curds	7	28	42	179	51	207
Cheese	1,265	3,310	5,157	14,253	6,442	17,563
Milk derivatives	—	—	368	1,115	368	1,115
Skim-milk returned free of cost to suppliers	54,772	2,574	1,944	92	56,716	2,666
Skim-milk sold to suppliers . .	114,116	5,323	29,846	1,413	143,962	6,736
Skim-milk sold to other people	53,056	8,200	30,366	4,500	83,422	12,700
Skim-milk used for cattle raising	317	15	5,553	358	5,870	373
Butter-milk	13,481	1,139	4,175	332	17,656	1,471
Whey	6,497	148	32,819	817	39,316	965
Total 1916	—	117,363	—	63,964	—	181,347
1917	—	122,649	—	68,012	—	190,661
1916	—	112,566	—	59,835	—	172,401
1915	—	81,913	—	59,888	—	141,801
1914	—	75,044	—	54,137	—	129,181
1913	—	73,355	—	56,484	—	129,839

There is an essential difference between the co-operative dairies and the others in the use that they make of skim-milk. The co-operative dairies return 24.6 % of it gratuitously to the suppliers, and sell 51.3 % of it to them at a low price; the other dairies only give back 2.9 % to the suppliers and sell to them 44 %. As for the rest of the skim-milk, the co-operative dairies sell 23.9 % to the public and keep 0.2 % for stock rearing; in the other dairies the corresponding quantities are respectively 44.8 % and 8.2 %. The price per kg. was on an average 4.7 öre to suppliers and 15.2 öre to the public; for the stock rearing purposes the price was 6.3 öre per kg.

The total expenses of the co-operative dairies amounted to 13,609,588 crowns i. e. 36 crowns 15 öre per 1,000 kç. of milk and cream received

SWITZERLAND.

1. THE SWISS CENTRAL BUTTER CONTROL. — *L'Agricolto, e Ticinese*, Year LII, No 22. Lugano, 5 June 1920.

The Swiss Central Association of Milk Producers has instituted the Swiss Central Butter Control, not to be confounded with the Central Federal Milk Office, now no longer in existence, which was carried on by the Confederation during the critical period of the butter supply in Switzerland.

The institution of this new Central Control was necessary in order to avoid a sudden fall in the price of milk and of its products, a fall which might be expected as the result of a congestion of the Swiss market, owing to the high rate of exchange, which prevents exportation of cattle and milk products.

The Swiss Central Butter Control is instituting sectional centres in every part of Switzerland; it provides for the utilization at fair prices of all the butter produced in Switzerland, but in no case below the cost of production or below its intrinsic value; it organizes the wholesale purchase and the regular distribution of the butter, and has the exclusive management of the importation and exportation of butter.

In a word, it endeavours to organize the whole production of butter in Switzerland, and to regulate this branch of trade.

All these tasks are facilitated for the Central Control in question by the fact that the Swiss Association of Milk Producers enjoys the moral support of the federal authorities, which thus concur in securing to Switzerland a regular supply of butter, and contribute also to the prosperity of the stock farming and milk industry of the country.

The sectional centres which the Central Swiss Control institutes everywhere collect the butter brought by the producers, whether organized or not, and form it into blocks of a uniform size in order that it may be sent to the market in one single shape; in their turn the sectional centres receive from the Central Control all the butter needed for supplying the Canton.

The sectional centres are composed of all the organized producers of milk, and all others who apply for admission. They have no direct intention of making profit; if there should be profit it is divided among the producers themselves in the form of bonuses, either in proportion to the quantities of butter and milk sent in, or for the improvement of the manufacture of butter.

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2. GRANTS MADE BY THE CONFEDERATION TO AGRICULTURAL ASSOCIATIONS IN 1919. — RAPPORT DU CONSEIL FÉDÉRAL SUR SA GESTION EN 1919. Département de l'économie publique. *Feuille Fédérale*, Vol. II, No. 20. Berne, 15 May 1920.

In 1919 the Federation was able to pay the whole amount of its grants to the agricultural associations of the country.

The associations in question and the grants made to them were as follow -

	Fr.
(1) Swiss Agricultural Society	34,572
(2) Federation of the Agricultural Societies of Romance Switzerland	16,693
(3) Agricultural Society of the Canton of Ticino	5,344
(4) Swiss Society of Alpine Economy	7,725
(5) Swiss Horticultural Society	13,086

The Swiss Peasants' Union obtained the federal grant in the usual proportions, viz. 40,000 fr., of which 25,000 were for the Secretariate and 15,000 for the inquiry into the yield of farms in Switzerland.

Besides this, foundation subsidies of 500 to 600 fr. each were granted to six new seed-selection societies to the amount of 3,100 fr. To six other syndicates of seed selectors grants were made for the purchase of machines and instruments for the cleaning and selection of grain to a total amount of 16,153 fr.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FRANCE.

1. THE LARGE MUTUAL LIVE STOCK INSURANCE COMPANIES IN 1919. — *L'Argus*. Paris, 17 October 1920.

Whilst the French local mutual live stock insurance societies number 503,056 members and insure stock to the value of 649,179,705 fr., the large mutual live stock insurance companies have only a comparatively small importance. The increase in risks covered in 1919 seems to depend rather on increased value per head insured than on real extension of business. Some of the companies have refused to send in returns, so that it is impossible for us to give the total results. We think it advisable, however to publish the following figures, which we take from the *Argus*:

1. *Numbers of Persons Insured by the Large Companies.*

	1918	1919
Avenir	12,000	12,150
Bétail	406	390
Bon laboureur	3,458	3,521
Cultivateurs réunis	2,249	?
Fédération des agriculteurs français.	3,525	4,053
Garantie fédérale	6,940	?
Maternelle	460	425
Mutuelle Hippique Française.	?	?
Mutuelle Percheronne	11,969	13,090
Prévoyante	800	850

Business done in 1919.

Names of companies	Date of foundation	Headquarters	Number insured	Value insured	Receipts	Losses		Reserve at end of 1919	Percentage of value	Proportion of guaranteed amount payable by the Company	Proportion of amount payable by company which is paid in cash.
						No.	Amount				
Avenir	1874	Paris	12,150	51,829,162	1,500,478	1,214	1,321,955	120,106	100%	100%	95%
Bétail	1872	Paris	390	375,877	12,530	9	3,112	2,947	80%	100%	80%
Bon laboureur	1863	Dreux	3,521	13,786,710	487,721	315	304,003	62,903	100%	100%	99%
Fédération des agriculteurs français	1905	Paris	4,053	11,683,409	528,546	301	279,938	6,451	80%	80%	80%
Garantie fédérale	1865	Paris	?	?	1,256,176	334	567,601	?	80%	Horses 90% Cattle, Goats and Pigs 100%	?
Maternelle	1854	Dreux	425	1,963,585	67,608	50	64,624	11,813	?	?	?
Mutuelle hippique française	1907	Paris	?	17,991,400	766,843	516	389,153	?	?	?	?
Mutuelle Percheronne	1898	Nogent-le-Rotrou	13,090	24,079,320	583,663	451	389,072	303,613	90%	90%	90%
Prévoyante	1894	Nemours	850	2,500,000	?	53	54,445	26,698	?	?	?

2. *Values insured.*

	1912	1913
Avenir.	41,267,142 fr.	51,829,162 fr.
Bétail.	359,302	375,877
Bon laboureur.	8,587,985	13,786,710
Cultivateur réunis	2,898,348	?
Fédération des agriculteurs français	6,357,830	11,683,409
Garantie fédérale	19,511,400	?
Maternelle	1,579,105	1,963,385
Mutuelle Hippique française.	?	17,997,400
Mutuelle Percheronne	16,697,550	24,079,320
Prévoyante.	1,418,715	2,500,000

The statistics for 1919 are still more incomplete. The *Caisse Centrale* (Bordeaux), the *Caisse des Propriétaires* (Paris), the *Cultivateurs réunis* (Nantes), the *Garantie Mutuelle d'Ilhiers* (Chartres), the *Union Beauceronne* (Pithiviers) and the *Union Centrale* (Bordeaux) have not sent in any returns, and the figures sent in by the other societies are very incomplete. We reproduce (page 780) those that the *Argus* was able to obtain.

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2. HAIL INSURANCE COMPANIES IN 1919. — *Le Moniteur des Assurances*. Paris, 15 October, 1920.

In France there are two Hail Insurance Companies: *L'Abeille* and *La Confiance*. The total receipts of these two companies in 1919 amounted to 15,510,255 francs, made up as follows:

Premiums	13,632,168 fr.
Policies, amendments of policies, and miscellaneous	1,437,960 fr.
Interest on investments	440,127 fr.
Total	15,510,255 fr.

The total expenditure amounted to 12,686,577 fr., as follows:

Compensation paid	5,664,537 fr.
Commissions and general expenses.	7,022,010 fr.
Total	12,686,577 fr.

The profit thus amounted to 2,823,678 fr. This is the highest figure reached since 1900 as the following table shows:

*Receipts and Expenditure of Hail Insurance Companies
from 1900 to 1919.*

Years	Receipts	Expenditure	Surplus	
			of receipts over expenditure	of expenditure over receipts
	fr.	fr.	fr.	fr.
1900	5,141,006	4,446,968	694,038	
1901	5,363,047	4,376,376	986,671	
1902	4,933,996	4,573,143	360,853	
1903	5,337,309	3,047,575	2,289,734	
1904	4,978,652	3,047,950	1,930,702	
1905	4,890,583	4,374,656	515,927	
1906	5,432,254	3,315,279	2,116,975	
1907	5,130,479	3,395,307	1,735,172	
1908	5,162,141	5,622,830	—	460,689
1909	5,289,904	3,859,008	1,430,896	
1910	5,801,686 *	4,202,951	1,080,735	
1911	6,016,991	4,649,758	1,367,233	
1912	6,900,100	5,190,530	1,709,570	
1913	8,027,136	6,351,689	1,675,447	
1914	8,895,522	7,436,647	1,458,875	
1918	13,464,776	11,768,374	1,696,402	
1919	15,510,255	12,686,577	2,823,678	
Totals . . .	116,375,832	92,863,618	23,872,908	460,689

ITALY.

1. **MUTUAL AGRICULTURAL INSURANCE SOCIETIES.** — Circular dated 30 April 1920 issued by the *Ufficio Tecnico delle Assicurazioni private* of the Ministry of Labour and Social Insurance.

Mutual agricultural insurance societies, which indemnify farmers against loss either to the goods employed in production or to the fruits of their labour, are a very powerful aid to national production. The State has, therefore, thought it desirable to issue special measures so as to encourage the formation of these societies. The measures taken with this object, the Decree-Law of 2 September 1919, No. 1752, and the Regulations of 26 February 1920, No. 271, which lay down the rules for its application

were given in our issue of July. A circular of 30 April of this year issued by the "Technical Office of Private Insurance" (*Ufficio tecnico delle assicurazioni private*) calls the farmers' attention to this important matter. In the first place it declares that the societies dealt with by the Decree must be mutual societies and must, in their working, have strict regard to the principles of mutual insurance; each society must, moreover, confine its operations to a commune, or part of one, and must not be worked for profit.

The mutual character of the societies which implies control by the members over one another, the limited sphere of action which makes such control effective and the exclusion of profit-making, justify the facilities granted by the law and assure the attainment of the ends in view.

The mutual societies are incorporated by decree of the prefect, which is published gratuitously together with the rules.

Documents relating to the formation and the working of the societies are exempt from registration fees and stamp duty and sums allocated to the reserve funds are exempt from income tax.

A fund of 200,000 liras has been placed at the disposal of the Minister of Labour and Social Insurance so as to enable him to assist in the formation of these societies, to provide for their initial expenses, to promote competitions and to grant subsidies.

The mutual insurance societies are recommended to form themselves into federations, which shall enter into relations either with the National Insurance Institute or with private companies. This is necessary in order to insure the development of the small mutual insurance societies on the lines contemplated by the law, and also to prevent that their working should be rendered precarious or impossible by their restricted sphere of action.

By article 2 of the Decree-Law, a Commission is set up in each province consisting of the Director of the Itinerant Professorship of Agriculture and of two expert members, one nominated by the Minister of Agriculture and one by the Minister of Labour. These Commissions assist the prefects in business relating to the mutual insurance societies, look after the interests of such societies and help to promote them. The instructions for this end are interesting. The fact that the Director of the Itinerant Professorship of Agriculture has a seat on the Commission insures the necessary knowledge as to the agricultural conditions of the province. But since a knowledge of the agricultural environment is not alone sufficient to insure the best results from the Commission, means must be taken to provide the necessary knowledge of other highly important aspects of the question. Thus it is indispensable that an expert in insurance questions should be on the Commission. The Circular above mentioned suggests that the third member of the Commission should be a live stock expert, or an expert in the organization of mutual or co-operative societies dealing with agriculture. Since the most important question at the moment is that of live stock insurance, in favour of which an active propaganda has been carried on for years, it is held that one of the experts should be the veterinary surgeon of the province.

Such commissions have already been established in many provinces. The Decree of 2 September 1919, which is of such vital interest to Italian farmers, is thus already beginning to have practical results, as to which we shall keep our readers informed.

2. INSURANCE AGAINST ACCIDENTS DURING AGRICULTURAL WORK. — DECRETO-LEGGE 23 AGOSTO 1917, N. 1450, CONCERNENTE PROVVEDIMENTI PER L'ASSICURAZIONE OBBLIGATORIA CONTRO GLI INFORTUNI SUL LAVORO IN AGRICOLTURA. — REGOLAMENTO APPROVATO CON DECRETO LUOGOTENENZIALE 21 NOVEMBRE 1918, N. 1889, PER L'ECCUZIONE DEL DECRETO-LEGGE.

In speaking of compulsory insurance against accidents during agricultural work, introduced by the Decree-Law of 23 August 1917, No. 1450, which came into force on 1 May 1919 (1), we drew attention to the rules for the assessment of compensation for accidents, so as to insure impartiality in the decisions. This delicate task was taken away from the insuring institution and handed over to special Assessment Committees composed of a president, nominated by the insuring institution, a representative of the landowners and farmers and a representative of the workers, appointed by the Ministry according to the advice of the organizations of the respective classes. We saw further that controversies relating to compensation or accidents were submitted for decision, not to the ordinary magistrates, but to special tribunals, known as Arbitration Commissions and composed of five members: one judge, two doctors not employed by the insurance institution, one representative of the persons subject to compulsory insurance and one representative of the insured persons. The Commission decides all controversies as to the right to the compensation granted by the law and as to the payment and distribution of it to those concerned. The decisions of such Commissions can be appealed against, in controversies of great importance, before a Central Commission established in Rome, presided over by a Councillor of the Court of Cassation and composed on the same lines as the local commissions. In order to prevent abuses of the same kind as have arisen in connection with industrial accidents, experts retained by either side are not permitted to give evidence before the Arbitration Commissions or the Central Commission. The interests of the parties can only be entrusted to *Istituti di Patronato e di Assistenza* of which, owing to the importance of their work, we think it well to give some account.

The object of the *Istituti di Patronato di e Assistenza* is to "render assistance to workmen who have met with accidents during work or to their dependants." They can apply for recognition by the Minister of Labour

(1) See article in our issue of March 1919.

on presentation of the documents relating to their formation, their rules, and a statement of the conditions upon which they render their services, showing the amount of remuneration which they receive or declaring that their services are given gratuitously. The approved Institutes are authorized to carry out all necessary acts towards the fulfilment of their aims, they can take legal action to safeguard the rights of workers who meet with accidents during work, or the dependants of such workers. If such an Institute does not exist in the district of any Arbitration Commission, the Minister must provide for its formation. He has the power to order inspections to be made of the approved Institutes and to revoke the approval of such as "do not act up to the object for which they were founded, or which act in a manner contrary to the conditions by which they are regulated." The revocation is final and no appeal can be brought against it.

Istituti di Patronato e di Assistenza founded by provinces, communes or other bodies, by vocational associations or federations, or by provident or mutual aid associations or federations can obtain recognition on condition that they have already been at work for a long period, thereby giving proof of vitality and earnestness of purpose.

Without giving the provisions which the *Istituti di Patronato e di Assistenza* must lay down in their rules nor the regulations for their foundation in districts where they do not exist, we will point out their duties. They must: (a) hang up in their offices a statement of the charges made for their services, when these are not given gratuitously and duly enter in a register the payments received by them, or by their agents, for services rendered; (b) hand to the persons whom they assist a receipt for the amount of remuneration received by them; (c) send in to the Ministry, within three months of the end of each financial year, the balance sheet for the year; (d) supply the Ministry with information and statistical data as to their working; (e) put at the disposal of the inspectors all the books and registers of the Institute and all files relating to business in which it takes part.

In execution of the provisions above outlined authorizations for the legal formation of *Istituti di Patronato e di Assistenza* in respect of agricultural accidents have been given by the proper authorities since April 1919. On 31 January 1920 the authorized Institutes numbered 43, distributed over 19 of the 35 insurance districts set up by the Decree of 24 November 1918, No. 1890.

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3. FORMATION OF THE MINISTRY OF LABOUR AND SOCIAL INSURANCE. — REGIO DECRETO 3 GIUGNO 1920, N. 700, CHE ISTITUISCE IL MINISTERO PER IL LAVORO E LA PREVIDENZA SOCIALE, STABILENDONE LA COMPETENZA.

The increasing development of labour politics and social legislation has proved in Italy, as in France, Belgium and Austria, the need for a special Ministry of Labour and Social Insurance. Such a Ministry was founded by the Royal Decree of 3 June 1920, No. 700.

According to this decree, the following services, previously belonging to the Ministry of Industry, Commerce and Labour, are handed over to the new Ministry: (1) The Labour Office, the Inspectorate of Industry and Labour, Co-operation and Co-operative Organizations; (2) Social Insurance, Mutual Aid and other Provident Institutions; (3) National Labour Registry and Unemployment Office; (4) Central Statistical Office.

The Technical Actuarial Office, founded by the Decree-Law of 21 April 1919, No. 603, is attached to the Ministry; so also are the Higher Council for Thrift and Insurance and the Council of the Order of Merit in Labour.

The Ministry of Labour and Social Insurance takes over the departments dealing with agricultural labour, agricultural co-operation and agricultural mutual insurance.

The new Ministry will also take over all the services by which assistance is rendered to workers and will supervise the National Institution for Assisting and Protecting Disabled Soldiers, founded by the Decree-Law of 21 March 1917, No. 481, as well as the National Institution for Soldiers, founded by the Decree of 6 January 1919, No. 55, and all other institutions having similar aims. It will be represented by its own officials on all Councils, Commissions and bodies dealing with questions of labour and social insurance.

SWEDEN.

MUTUAL INSURANCE AGAINST HAIL, IN 1918. — *SVERIGES OFFICIELLA STATISTIK: ENSKILDA FÖRSÄKRINGSÄNSTÄLTER DE 1918 AV FÖRSÄKRINGSINSPEKTION*. Stockholm, 1920.

In 1918 the receipts of the mutual insurance societies against hail amounted to the following sums in crowns:

Premiums	302,764.93
Interest on investments	8,537.55
Other revenues	218.65
Balance loss	17,509.66

329,030.79

The expenses, which show a balance profit of 37,877.76 crowns, were as follows in crowns:

Compensation paid, including costs of settlement	205,270.47
Working expenses	79,053.99
Written off as irrecoverable	5,371.07
Other expenses	1,457.50
Balance profit	37,877.76

329,030.79

The year's balance sheet comprises, on the credit side:

Cash in hand	5,778.93
Cash in bank	167,794.84
Money in public administrations	6,235.10
Cash received in respect of previous years . . .	119,269.02
Sums to be recovered on previous years	12,512.88
Furniture	3,032.25
Sundry assets	6,082.97
	<hr/>
	320,706.89

The debit side is composed as follows:

Reserve funds	284,164.53 crowns
Loans contracted	34,352.28 "
Sundry liabilities	2,190.08 "
	<hr/>
	320,706.89 crowns

At the close of the financial year there were 27,404 policies in force, covering risks valued at 138,292,071 crowns. Compensation was paid on 790 policies. The largest indemnity amounted to 6,923.30 crowns.

The following is the rate of premiums charged per 1000 crowns insured capital by the different mutual insurance companies which insure against hail:

Allmänna Hagelskadeförsäkringsbolaget . . .	3.24
Uppsala läns	5.00
Östergötlands läns	1.50
Skåne-Hallands	1.20
Alvsborgs m. fl. läns	3.00
Skaraborgs läns	3.00
Örebro läns	8.00
Västmanlands läns	1.50

SWITZERLAND.

1. THE DEVELOPMENT OF HAIL INSURANCE AND THE STATE GRANTS MADE TO IT IN 1919. — RAPPORT DU CONSEIL FÉDÉRAL SUR LA GESTION EN 1919. Département de l'économie publique. *Feuille fédérale*, Vol. II, N^o. 20. Berne, 15 May, 1920.

The following table, containing the principal data respecting the development of hail insurance in 1919, shows a considerable increase in the number of policies, which in that year amounted to 2,953. The increase of the values insured was 21,562,833 fr. It must, however, be added that this increase was partly due to the fact that the amount of the insurances in the two half cantons of Obwald and Nidwald in 1918 appears

Development of *Mail Insurance in 1919, and Grants made to it.*

Cantons	Policies	Value insured fr.	Premiums fr.	Cost of policy (exclusive of federal sub-sidies)		Federal grants in fr.
				fr.	Grants for premiums fr.	Total fr.
1. Zurich	7,101	18,137,240.00	329,762.80	6,473.85	41,220.30	47,694.15
2. Bienne	18,379	53,151,050.00	734,823.40	16,692.45	75,277.28	91,969.73
3. Lucerne	8,360	35,816,120.00	633,334.20	6,816.00	63,333.42	70,149.42
4. Uri	1	50,000.00	751.80	—	225.55	94.65
5. Schwyz	1,146	2,449,760.00	61,373.20	201.77	6,137.32	6,339.09
6. Obwald	1,009	1,237,920.00	29,008.30	857.85	2,900.83	3,758.68
7. Nidwald	874	1,123,180.00	26,430.30	716.85	2,643.93	3,359.88
8. Zug	538	1,174,470.00	28,547.10	—	2,854.71	2,854.71
9. Fribourg	1,358	1,320,260.00	32,601.90	—	3,260.19	3,260.19
10. Solothurn	3,013	4,131,040.00	99,586.80	1,194.45	15,870.19	17,064.64
11. Bâle - Town	6,597	11,298,280.00	117,640.70	2,733.30	11,705.06	14,438.36
12. " - Country	62	10,796,580.00	128,111.30	5,714.55	12,861.39	18,575.94
13. Schaffhausen	3,337	466,760.00	6,188.70	46.05	1,618.38	1,664.03
14. Appenzel - Exterior	2,503	5,048,620.00	61,662.00	3,950.70	9,363.20	12,413.90
15. " - Interior	1,148	5,100,190.00	69,165.70	2,131.95	8,645.70	10,778.65
16. St. Gall	1,591	1,921,130.00	36,762.70	1,101.70	4,595.33	5,597.02
17. Argau	6,618	477,350.00	6,047.50	79.50	453.56	533.06
18. Thurgau	14,427	12,921,830.00	197,946.20	5,620.20	20,625.07	26,245.27
19. Vaud	14,427	18,492,360.00	252,430.90	11,763.30	19,953.14	31,716.43
20. Valais	6,070	11,761,590.00	141,189.70	4,906.35	19,332.14	24,238.49
21. Neuchâtel	5,627	22,245,510.00	382,503.90	4,633.80	62,502.72	67,136.52
22. Geneva	78	133,800.00	5,728.90	70.20	859.34	929.53
1919:	1,512	3,480,757.00	118,722.45	427.00	29,674.06	30,101.06
1918:	868	4,996,920.00	191,091.90	733.80	57,507.59	58,241.39
1919:	91,692	228,039,017.00	3,683,112.35	75,898.62	476,419.10	552,318.22
1918:	88,739	206,476,184.00	3,244,691.61	73,944.26	440,620.78	514,765.04

also in the statement for 1919. The reports from the two Unterwalds only reached the Department of Public Economy after the closing of the accounts of 1918, so that the federal subsidies had to be deducted from the credit side of the statement of the previous year.

2. CATTLE INSURANCE AND THE SUBSIDIES GRANTED FOR IT IN 1918 — RAPPORT DU CONSEIL FÉDÉRAL SUR LA GESTION EN 1919 Département de l'économie publique. *Feuille fédérale*, Vol. II, N° 20. Berne, 15 May 1920.

Subsidies for insurance against mortality amongst live-stock were granted in accordance with the decree of the Federal Council of 30 October 1914.

In the table which we give on page 790 we see that the number of animals insured in 1918 was rather less than in 1917: the same can be said of the Federal subsidies.

3. HAIL INSURANCE IN THE CANTON OF TICINO — *L'Agricoltore Ticinese*, Year LII, No. 23, 12 June 1920 and No. 29, 24 July 1920.

The Grand Council of the Republic and Canton of Ticino, by a decree of 1 June 1920, has granted subsidies for insurance against hail.

The decree says: To any one who insures crops against hail, in a duly authorized institution, the State grants a subsidy of 50 per cent. of the cost of the policy and a subsidy up to 30 per cent. of the insurance premium. For this purpose a cantonal reserve fund for hail insurance has been instituted, to which the State contributes 10,000 fr. provided the Confederation pays an equal sum as a subsidy.

The interest of this fund is devoted to increasing the subsidy for the purpose of adding to the supplementary premiums which are levied in exceptional cases. The subsidies are assigned by the Council of State, and must not exceed the amount of the interest of the fund of the preceding year.

For the year 1920, the Council of State granted a credit of 30,000 fr. for the payment of the subsidies in question.

On the 10 July was published the Executive Decree for the application of the above mentioned Legislative Decree of 1 June 1920. By Art. 1 it fixes the maximum limit of the subsidies to hail insurance premiums as follows; First class: Meadows and permanent grass lands, 3 per cent. of the value insured. Second class: Cereals, potatoes, turnips, and beet for fodder, 4 per cent. Third class: Broad beans, chick-peas, oil producing plants, pears and cider apples, chicory, and sugar beet, 7 per cent. Fourth

*Insurance against Mortality amongst Live Stock in 1918
and Subsidies Granted for it.*

Cantons	In animals, insured	No of live stock	Compensation paid		Cantonal subsidies		Federal subsidies	
			Total sum	Per loss	Total sum	head of cattle insured		
1. Zurich	Cattle	111,704	2,201	311,535.00	141	113,211.00	1.01	111,704.00
	Small live stock . .	7,510	478	18,950.00	40	4,112.00	0.55	3,004.00
2. Berne	Cattle	190,744	4,715	775,405.36	164	190,744.00	1.00	190,744.00
	Small live stock . .	2,435	176	5,511.62	31	487.00	0.20	487.00
3. Uri		12,172	377	71,834.40	193	43,522.68	3.57	12,172.00
4. Glaris		11,951	387	68,315.90	177	20,000.00	1.69	11,951.00
5. Fribourg		77,682	1,654	147,461.84	84	62,305.60	0.80	62,305.60
6. Solothurn	Cattle	41,071	984	136,052.48	137	41,071.00	1.00	41,071.00
	Small live stock . .	6,700	398	11,136.64	28	2,010.00	0.30	2,010.00
7. Bâle City		1,554	40	12,460.40	337	4,534.50	2.92	1,554.00
8. Bâle Country	Cattle	19,052	565	66,012.11	119	19,052.00	1.00	19,052.00
	Goats	747	12	238.00	21	289.80	0.40	289.80
9. Schaffhausen	Cattle	12,421	267	100,323.23	376	25,057.23	2.02	12,421.00
	Small live stock . .	2,131	145	5,909.24	41	1,487.56	0.70	852.10
10. Grisons		75,096	2,250	761,286.27	378	223,960.77	2.96	75,096.18
11. Aargau	Cattle	78,135	2,037	290,915.45	143	78,135.00	1.00	78,135.00
	Goats	7,658	469	16,132.10	34	3,829.00	0.50	3,063.20
12. Thurgau	Cattle over 6 months old .	54,094	1,920	421,301.09	219	54,094.00	1.00	54,094.00
	Cattle under 6 months old .	12,571	340	59,655.85	175	6,285.50	0.50	6,285.50
13. Ticino		9,996	238	43,281.52	182	14,692.13	1.47	9,996.00
14. Vaud		50,149	1,186	317,274.35	267	75,223.50	1.50	50,149.00
15. Valais		32,899	682	131,379.60	193	32,899.00	1.00	32,899.00
16. Neuchâtel		10,478	193	22,422.08	123	12,183.00	1.10	10,478.00
17. Geneva		7,806	182	37,295.40	205	19,600.00	2.00	7,806.00
Total	Cattle	809,675	20,234	3,778,213.47	187	1,036,570.91	1.28	787,808.28
	Small live stock . .	27,181	1,678	57,968.60	35	12,254.36	0.45	9,715.40
1918		836,856	21,912	3,836,182.03	—	1,048,825.27	—	777,532.68
1917		851,787	24,525	3,931,740.28	—	1,060,322.35	—	811,728.40

class : Beans, peas, textile plants, pot-herbs, pears and apples for the table, nuts and stone fruit, 10 per cent. Fifth class : Vines, 20 per cent. Sixth class : Hops, 25 per cent. Seventh class : Tobacco, 39 per cent.

By Art. 2, the Canton grants to hail insurance : (a) a subsidy of 20 per cent. of the premium if the property insured is one of the crops mentioned in the first four classes of the preceding article, and 30 per cent. if the crop is one of those named in the last three classes ; (b) a subsidy of 50 per cent of the cost of the policy.

The Canton also distributes the federal subsidy in favour of hail insurance.

These provisions have fulfilled a long cherished desire of the agricultural population of Ticino.

The federal and cantonal subsidies granted by these decrees to hail insurance are certainly considerable.

For example, a man who insures a crop of 50 hectares of native vines at 100 fr. per hectare, making a total of 5000 fr.) must pay a total premium of 20 per cent of the value insured (fifth class of Art. 1. of the Executive Decree, 10 July 1920, that is, 1000 fr.). The subsidy granted by the Canton to the person insured is equal to 30 per cent. of the premium, which in this case is 300 fr.; that granted by the Confederation also equals 30 per cent. of the premium, that is 300 fr.: the total subsidy is therefore 600 fr. (Paragraphs *a* and *b* of Art. 2. of the Executive Decree). It therefore remains for the insured person to pay 400 fr. (1000 - 600) realizing 600 fr. in subsidies. In the same way a man who insures 30 hectares of American vines at 60 fr. the hectare will pay 144 fr. and receive a subsidy of 216 fr.

A farmer who insures 20 quintals of maize at 50 fr. per quintal must pay a premium of 4 per cent. of the value insured (second class), that is 40 fr. The subsidy of the canton is equal to 20 per cent. of the premium (8 fr.) that of the Confederation is the same amount, total 16 fr. By the insured person 24 fr. remain to be paid (40 - 16), realizing 16 in subsidies.

An agriculturist who does not insure takes upon himself the risk of hail, and at the same time gives up the cantonal and federal subsidies by which he might have benefited. It can scarcely be supposed that under these conditions there can be many who would not profit by such evident advantages.

4. COMPULSORY CATTLE INSURANCE IN THE CANTON OF TICINO. — *L'Agricoltura Ticinese*, No. 36. Lugano, 11 September 1920,

In 1896 cattle insurance was already in operation in the Canton of Ticino, but the procedure which the law of 1896 made compulsory for the formation of insurance societies was a considerable obstacle to insurance, although cattle owners were in favour of it. The insurance societies which were formed worked, on the whole, very well and were of great use to the peasants. At the end of 1919 there were 64 insurance societies insuring 10,306 head of cattle to the value of 8,167,240 fr. On 24 April 1919 cattle over six months old numbered 31,115 head, of which 20,000 head worth at least 20 million francs were not yet insured and did not benefit by the subsidy, amounting in all to about 100,000 frs. per year, which was granted by the Canton and the Confederation.

On account of this the Union of Ticinese Peasants wished to include in its programme the introduction of compulsory insurance, and the re-

removal of the obstacles and difficulties which the law of 1896 put in the way of setting up insurance societies, doing away with the demand which had to be made by at least ten cattle owners, summoning of meeting, etc. The Secretariate inquired into the question and drafted a bill which was approved by the Assembly of Delegates in October 1919 and was laid before the Council of State, which made some modifications to it and presented it to the Grand Council by which it was adopted.

The new law, which came into operation in September 1920, establishes in the whole of the Canton compulsory insurance of cattle against loss by disease or accident. The Canton subsidizes the said insurance to the extent of 20 % of the sums paid by the insured persons. This is in addition to the federal subsidy.

Cattle are not eligible for insurance which are under six months old, which are not found to be healthy at the preliminary inspection in view of insurance, or which have been bought with the object of selling them again.

Cattle subject to compulsory insurance may not be insured in other societies, except against fire, under penalty of forfeiture of the right to compensation.

Each commune must set up a cattle insurance society according to the rules contained in Articles 5 to 13 of the law in question.

Subject to the approval of the Council of State, several communes can unite together to set up a joint insurance society. Communes containing fewer than 50 head of cattle subject to insurance are compelled to join such a society; the Council of State decides to what other communes it shall be joined.

The municipalities of communes which have not already got an insurance society, founded according to the law of 1896 or the present law, must set up a society on the lines laid down by the present law during 1922 at the latest.

Each society must have rules which shall determine, within the limit of the law: (a) the executive bodies of the society and their functions; (b) the forms to be followed for estimating the value of and inscribing the animals to be insured; (c) the premiums which the insured persons must pay and their rights and duties; (d) the rules for fixing the compensation; (e) the reasons for which an insured person loses his right to compensation; (f) the procedure in case of disputes; (g) rules concerning the presentation of accounts and the formation of a reserve fund.

These societies are under the supervision of the Cantonal Department of Agriculture.

Part III: Credit

UNITED STATES.

THE OPERATIONS OF THE FEDERAL FARM LOAN BOARD IN 1919.

OFFICIAL SOURCE:

THIRD ANNUAL REPORT OF THE FEDERAL FARM LOAN BOARD, COVERING THE PERIOD FROM NOVEMBER 30, 1918, TO NOVEMBER 30, 1919. Washington, 1920.

The Farm Loan Act directed that "as soon as practicable" the Farm Loan Board should divide the Continental United States into 12 districts, and then further provided: "The Federal Farm Loan Board shall establish in each Federal land bank district a Federal land bank."

This was the mandatory provision of the Congress to assure the creation and operation of a Federal farm loan system. Subsequent sections of the act provided for the organization of these banks, and assured their establishment with adequate capital by a provision that if, within 30 days after the opening of subscription books, any part of the minimum capitalization of any Federal land bank should remain unsubscribed, it should be the duty of the Secretary of the Treasury to subscribe to the balance thereof on behalf of the United States. It was further provided that their management should be temporarily in the hands of directors appointed by the Farm Loan Board.

In addition to this mandatory provision, the Congress also included in the act a permissive provision in these words: "That corporations, to be known as joint-stock land banks, for carrying on the business of lending on farm mortgage security and issuing farm loan bonds, may be formed by any number of natural persons not less than ten."

Subsequent provisions defined the capitalization, powers, and limitations of these joint-stock land banks. The Government of the United States has no financial interest in these banks, and their officers and directors are chosen by their stockholders.

§.I. NUMBER AND OPERATIONS OF THE JOINT-STOCK LAND BANKS.

Up to 30 November 1918, only nine joint-stock land banks had been incorporated, and the aggregate of the loans made by those banks to that date was less than \$7,300,000, which represented less than 5 per cent. of the total business done by the entire system. During the 12 months ending 30 November 1919, there has been a marked change. The number

of joint-stock land banks has increased from 9 to 30, the aggregate paid in capital from \$2,010,850 to \$8,638,650, and the total volume of loans made from \$7,289,870 to \$54,126,357.75. Still more striking is the change in the relative proportion of business done by the two classes of banks. In the month of November 1918, the loans made by the joint-stock land banks represented 15 per cent of the business of the system for that month. In the month of November 1919 the loans made by these banks represented 38 per cent. of the business of the system. The orders given for the engraving of farm loan bonds bearing date 1 November 1919, to be used between that date and 1 May 1920, indicate that the joint-stock land banks expect to do a volume of business in that period approximately 75 per cent of that expected to be done by the Federal land banks. It may therefore be said that the increase in number, and the development of the business of joint-stock land banks is the outstanding feature of the operations of the Federal farm loan system during the past year.

The development of this business has not resulted from the absorption of any considerable amount of business that would otherwise have gone to the Federal land banks. These latter banks have done in the last year a larger business than they did in the preceding year, the loans closed being for the year \$134,554,920, as against \$119,188,135 for the previous year. The business of the joint-stock land banks has been almost wholly business that would otherwise have gone to old-line mortgage agencies. The joint-stock land banks have profited by two great advantages afforded them under the Farm Loan Act — first, the opportunity of assembling the separate mortgages which they took, as combined security for a general issue of farm loan bonds, and secondly, the ability to sell these bonds as tax-exempt securities. Possession of these advantages enabled them to offer to the borrower a long-term amortized mortgage at a low rate, thereby securing promptly and at small cost a large volume of business. Ability to sell a standard form of tax-free security enabled them to command a large amount of investment capital at a low rate of interest.

The total number of loans made to 30 November 1919 by the joint stock land banks was 5,815, and the aggregate amount loaned was \$54,126,357, representing an average of \$9,308 per loan. The Farm Loan Act as passed by Congress contains no express and specific limitation upon the amount which a joint-stock land bank may loan to any borrower, nor does it specify either the character of the borrower to whom a loan may be made, or the purposes to which the proceeds of the loan may be applied, but the Farm Loan Board has ruled that a joint-stock land bank may not make a loan to any one borrower in excess of 15 per cent. of its capital stock, nor, in any event, in excess of \$50,000. In response to a request for a ruling upon the subject, the Solicitor of the Treasury held that joint-stock land banks were subject to the same prohibition as Federal land banks against making loans to corporations. Upon a request for a review of this opinion by the Attorney General, the opinion of the Solicitor of the Treasury was approved and confirmed. The Board has also ruled that any loan made by a joint-stock land bank must be for a

purpose having some relation to the primary declared purpose of the Farm Loan Act, viz.: "To provide capital for agricultural development," and has required joint stock land banks to secure from each applicant a statement of the purpose to which he intends to apply his loan. The loan is not to be made unless this purpose may fairly be said to be related in some way to agricultural development.

It is very difficult to deduce from the operations of these joint-stock land banks for the very limited time in which they have been in operation any estimate of their earning capacity. They have, of course, found what the Federal land banks found, and what both life and fire insurance companies had found long before — that it costs money to "get business on the books." It has been the general practice of the joint-stock banks to pay a commission to the agent through whom a loan came to them. The charge for appraisal of land and determination of title which a bank is authorized by the act to make against a borrower can not in any case exceed actual cost, and in many cases fails to meet actual cost. One bank, incorporated over a year and a half ago, whose officers are men of integrity and ability, and have had long banking experience, has not yet overcome the impairment of capital which it suffered during its first half year. Another one of the banks has been extremely profitable. In the case of a number of the others the reports of earnings are of comparatively little value, because of the fact that the joint-stock land bank is operated in some cases in connection with a trust company, a National or State bank, or a mortgage-loan company, and there is an arbitrary division between the two related institutions of rent, salaries, and other expenses.

For the purpose of estimating the probable profits of a joint-stock land bank, a pure estimate is of as much value as any demonstrated results to date. It is easy to see that the gross profits of such a bank are 6 per cent. on its capital and 1 per cent. on the volume of farm-loan bonds outstanding, which represents 15 per cent. additional as the amount of bonds issued may be 15 times the capital stock. It has been the practice of these banks to realize a small premium on the sale of their bonds. These premiums, added to the charges which they are entitled to make against borrowers, should nearly balance the cost of "getting business on the books." Any balance lacking would certainly be made up out of the profits of the following year. From the gross earnings, which would amount to 21 per cent. upon the stock, if all the money of the institution could be kept invested all the time at 6 per cent., must be deducted the loss on temporarily unproductive funds and the expense of doing business. The net return is dependent upon the ability of the management to keep down expenses and minimize the amount of idle funds.

§ 2. APPRAISAL SYSTEM.

With 20 or 25 joint-stock land banks in operation, there has necessarily been a very considerable addition to the amount of supervisory work imposed upon the Farm Loan Board. In some cases, either office

or field employees of newly organized banks started to do business without proper knowledge of the Farm Loan Act and of the relationship between the Federal land banks and the joint-stock land banks. Agents or solicitors for business advertized in some cases that they represented the Federal farm loan system, or that they were "authorized by the Secretary of the Treasury," or that they were prepared to make "Government loans." In cases where joint-stock land banks employed in the field men who had up to that time been representing the Federal land bank of the district, confusion resulted in that neighbourhood.

The board has insisted that, while any eligible borrower was free to make his loan from a Federal land bank or a joint-stock land bank, and it was utterly immaterial to the Board which he chose, he must nevertheless be made to know which part of the system he was dealing with — that he must make his choice with knowledge and understanding. The Board has deprecated the practice of either class of banks taking employees — particularly field employees — from the other class, and has insisted that neither class of banks must ever, in their literature or elsewhere, refer to the loans that they were making as a "Government loans" — that, on the contrary, it must be made plain to every borrower that the money that he was borrowing was the money of a chartered corporation, which was being loaned to him as a business proposition, with the same conservatism in lending, and with the same strict insistence upon repayment as would prevail in any purely private corporation in which the Government did not happen to be even a minority stockholder.

The operations of the joint-stock land banks have also involved a readjustment of the appraisal force. Prior to their existence the Board had appointed in each district a sufficient number of appraisers, to cover the business of the Federal land bank of the district. These appraisers were routed by the Federal land bank and worked under the guidance and instruction of the officers of the bank. When the first joint-stock land banks began to operate, their needs were met by the temporary delegation to their work of one or more of the existing appraisers. As their business developed, it became evident that in several districts at least it would be impossible for both the Federal land bank and the joint-stock land banks to be adequately served by the existing force of appraisers. It was necessary that the force should be increased. The entire force could not remain subject to routing and directing by the Federal land bank.

The only alternatives were either (1) to create in each district where joint-stock land banks were operating an appraisal force under the control of a chief appraiser, who would maintain an office independent of any one bank, to whom all applications would come and by whom all appraisers would be routed and directed; or (2) to appoint additional appraisers who would be Federal appraisers in the same sense and to the same extent as those already employed, but who would be primarily delegated to the service of a particular joint-stock land bank, and whose routing would be done by that bank. The objections to the former method were that it would involve additional expense and would practically make it neces-

sary that all applications should be appraised in order, without regard to their relative urgency. This would have been objectionable to both banks and borrowers. The objection to the latter method was that appraisers working exclusively, or almost exclusively, for one bank would naturally be influenced, perhaps unconsciously, by the views of the officers of that bank as to land values, and might become either liberal or ultraconservative in their appraisements, thereby tending to destroy one of the valuable by-products of the farm loan system, viz. a uniformity of Federal appraisement, which is fast establishing a standard of farm-land values throughout the country.

After careful consideration of the advantages and disadvantages of both methods, the Board decided in favour of the latter, but in order to guard against the possible divergence in appraisement, and at the same time to make more effective the subsequent examination by the Board of mortgages tendered as security for bond issues, it was determined to establish a force of "reviewing" appraisers, who will not make any original appraisements, but will be continuously occupied in examining and re-examining such loans as are referred to them by the Board. It is believed that this system of reviewing original appraisements will preserve uniformity, eliminate appraisers whose original appraisements are not properly made, increase the value of the Board's approval of collateral, and preserve uniformity not only as between the various banks in any particular districts, but as between lands in contiguous districts separated only by State lines. This plan has received the approval of both the Federal and the joint-stock land banks which have been consulted, and at the date of the Report was about to be put into effect by the Board.

§ 3. NATIONAL FARM LOAN ASSOCIATIONS.

National farm loan associations are the local organizations upon which the Federal farm loan system is based, in so far as the operations of the Federal land banks are concerned. These banks can make loans only to the members of such associations. On 30 November 1918, there were 3,365 associations in actual operation, with 64,357 members, making the average membership of each association 19.4. The total amount loaned as of the same date was \$147,452,861, with an average amount loaned per association of \$43,820. On 30 November 1919, there were 3,890 associations in actual operation, with an average membership of each association of 27.5, while the total amount loaned as of that date was \$282,007,781, with an average amount loaned per association of \$72,495. The average number of members in each association has, therefore, increased during the year from 19.4 to 27.5, and the average amount loaned through each association from \$43,820 to \$72,495. This indicates a healthy and steady growth both in the membership of the associations and the amount of business transacted by them.

In the first eight months of the operation of the farm loan system

there were 1,539 associations chartered, and for the following 12 months there was an increase in the number of 1,526. During the last 12 months the increase has been only 535. The decline in the number of new associations is not due to any lack of interest upon the part of the farmer-borrower in the farm loan system; it is the result of a situation and is inevitable, and will be progressive. The number of associations being now in excess of the number of counties in the United States, it follows that there is very little agricultural territory not already included within the boundaries of one or more existing associations, and while local conditions sometimes make advisable the incorporation of a new association to cover territory already covered wholly or in part by an existing association, the growing tendency to the consolidation of small associations will ultimately make the number of associations practically constant. This tendency to consolidation has had the approval of the Farm Loan Board, as it is found that the larger associations, with their larger incomes, are better able to command the services of competent and interested secretary-treasurers.

In this connection, it may be added that the secretary-treasurer of an association is the vital force of his association. His duties are of such a character as to require the highest degree of tact and efficiency in the conduct of the business. He is the active executive officer of the association, and it is found that upon his activity for and interest in the association depends in large measure the growth of the association. He is the custodian of its funds, securities, records, papers, certificates of stock, and all documents relating to or bearing upon the conduct of the affairs of the association. He is required to ascertain and report to the Federal land bank any delinquencies upon the part of the members of the association in the matter of the payment of taxes due upon lands mortgaged. He is selected by the directors of the association and is not required to be a borrower. The Farm Loan Board is constantly bending its efforts to increase the efficiency of the secretary-treasurers by impressing upon them the fact that they occupy a most responsible and important position in a very great piece of co-operative machinery. The efforts in this direction are encouraging, and it is hoped in time that secretary-treasurers of farm loan associations will compare favourably with the average country bank cashier in point of business ability and efficiency in the conduct of the affairs of their associations.

A number of farm loan associations have a membership in excess of 200, and have closed loans in excess of a half million dollars. Such associations would own as much as \$25,000 of stock in the banks of their respective districts and would receive \$1,500 or more in dividends on the 6 per cent. basis, which a majority of the Federal land banks have already established.

The capital stock of associations increase with the business done by such associations, and as time goes on the capital stock of these associations will be as large as, in fact larger than, the capital stock of the average country bank, and they will be receiving dividends in increasing amounts from the several Federal land banks.

Eleven trust or mortgage companies have been appointed as Federal land bank agents in sections where farm loan associations have not been organized.

§ 4. LAND SPECULATION.

The outbreak early in the spring of an active speculation in farm lands in Iowa and some adjoining States, coming as it did on top of a period of abnormally high prices for agricultural products, emphasized the necessity for the application of preventive measures to guard against the danger of making loans upon the basis of temporarily inflated valuations. The Farm Loan Act contains the wise provision that in making appraisals for loaning purposes "the value of the land for agricultural purposes shall be the basis of appraisal and the earning power of said land shall be a principal factor." The Board had previously construed this provision as making sale price the standard for appraisal on low-priced lands, even though earning power was high, and as cutting out of consideration all values due to possible suburban development and values which were the result of the activities of colonization companies or real estate speculators and "booms." It had also unsparingly applied the "earning-power" test to high-priced lands when the values were largely the result of climatic or community advantages. It was held, further, that this "earning power" must be calculated upon an average and not upon a war time basis of prices for products.

These rulings were supplemented by another that where a farm has sold within a year at a price materially higher than the last previous sale, such enhanced price was not to be taken into consideration in making an appraisal. In July it was further ruled that — with a few negligible exceptions — not more than \$100 an acre was to be loaned on land devoted to general agricultural purposes, even in those sections where sales were being made at prices ranging from \$250 to \$400 an acre. These rules have been enforced as to all banks operating under the Federal farm loans system, notwithstanding knowledge of the fact that private loaning agencies and even insurance companies have been in some cases more liberal in their loaning limits. It might be urged that the fact that all mortgages under the system are on the amortization plan, where the principal is annually reduced, justified a more liberal policy, but the Board has declined to accept this principle, and has refused to allow the banks to enter into any competition as to the amount of a loan. It has insisted that loans must be limited to such an amount as would be conservative without the amortization feature, and has urged the banks to lose without regret the application of any borrower to whom a larger loan was offered by any other lender. It is believed that these rules will amply suffice to assure the continued safety of loans, and to protect the banks and the buyers of their bonds from the results of any possible future depreciation in the value of farm lands, and it is also hoped that this policy may to some extent operate to check land speculation and the creation of speculative values.

§ 5. EARNINGS OF BANKS.

One of the most gratifying features of the last year is the increased earning power of the Federal land banks, and the very great improvement in their financial condition which results from this increased earning power. The expenses of these banks are largely made up of the cost of making appraisements of land and examinations of title. For these services they are authorized to charge applicants for loans reasonable fees not exceeding actual cost. These fees, while necessarily appearing in their income accounts as receipts, are in effect merely contributions by borrowers toward these expenses, the fees charged being materially less than the cost of the service. The profits of the banks are from interest account. On the present volume of loans the banks are realizing from borrowers a rate about nine-tenths of 1 per cent. higher than the rate which they are paying on their bonds. On such loans as represent their capital, against which no bonds have been issued, they are realizing 5 ½ per cent. The gross annual profit on interest account, therefore, approximates at this time \$3,500,000. At the beginning of the year it was materially less, but it grows, and must continue to grow, with each succeeding month that shows an increase in the volume of loans. From this profit must be deducted all expenses in excess of the aggregate of fees charged borrowers.

The consolidated statement of condition of the 12 Federal land banks as of 30 November 1918, showed an excess of expenses and interest charges over earnings from organization to that date of \$138,526. The similar statement of 30 November 1919, shows an excess of earnings over expenses and interest charges of \$1,461,440.88. It is apparent, therefore, that their net earnings for the 12 months were \$1,599,966.88.

The net surplus of \$1,461,440.88 has been distributed as follows:

To reserve	\$ 350,500.00
To undivided profits	698,421.96
To dividends	412,518.92
- Total	\$ 1,461,440.88

The wise and conservative provision of the Farm Loan Act is that each bank shall semi-annually carry to reserve account 25 per cent. of its net earnings until said reserve account shall show a credit balance equal to 20 per cent. of the outstanding capital stock, after which 5 per cent. of the net earnings shall be annually added thereto. Whenever the reserve shall have been impaired, the balance of 20 per cent. must be fully restored before dividends are paid.

Fairness to borrowers requires that reasonable dividends shall be paid, if earnings are available for the purpose, for the reason that each borrower is required, through his farm loan association, to become a stockholder to the extent of 5 per cent. of the amount of his loan. He borrows at a 5 ½ per cent. rate, but on a loan of \$1,000 he receives only \$950, being

required to invest \$50 in stock. If he receives no dividend on this stock, he is paying \$55 annually on a loan of \$950, or at the rate of nearly 5.8 per cent., but if he receives a dividend of 6 per cent. on his stock, the interest rate on his loan is reduced to 5.47 per cent. Dividends at this rate were paid by six of the banks during the year and three more were added to the list after the close of the year. It will be noted, however, that the amount distributed in dividends to 30 November 1919, represents only 26 per cent. of the net earnings of the last year. While stockholders in a co-operative enterprise, whose stock holding is enforced and not voluntary, have rights which should be respected, the Board nevertheless feels that the credit of the banks, as constant sellers of securities, should be fortified to the fullest possible extent, and that they and their bondholders should be made absolutely secure by the accumulation of a surplus sufficient to take care of any eventuality, however unlikely, which it is at all possible to anticipate.

In accordance with the provisions of the fifth section of the act, the semi-annual payment and retirement of stock originally subscribed, which was begun in November 1918, was continued in May and November, 1919. The amount paid at each of these three periods on account of the retirement of the stock held by the United States Government was: November 1918, \$126,714.80; May 1919, \$499,606.20; November 1919, \$572,569; making a total of \$1,198,890 and reducing the Government holding from \$8,892,130 to \$7,693,240.

§ 6. PURPOSES OF LOANS.

Believing that there is a general and proper public interest in knowing not only the number and amount of loans made under the farm loan system, but in knowing also the purposes for which the loans are made, and the value of the lands and buildings upon which they are secured, the Board has analyzed and entered up to date records of 83,826 loans made by the Federal land banks aggregating \$251,426,600. The Board has also records of 19,944 loans which were cancelled or rejected. It is interesting to note that 11 per cent. of the amount loaned was for the purchase of the land mortgaged and 2 per cent. for the purchase of other land, making a total of 13 per cent. for the purchase of land; 9 per cent. for buildings and improvements; 2 per cent. for implements and equipment; 3 per cent. for the purchase of live stock; 59 per cent. for the liquidation of existing mortgages; 9 per cent. for the payment of other debts of the borrowers; and 5 per cent. for the purchase of stock as required by the act. These figures ignore the amount borrowed for fertilizers and irrigation, which amounts to about \$600,000, or a little less than one-fourth of 1 per cent. This total of \$251,426,600 of mortgages is secured upon farms where the appraised value of the land is \$555,455,685 and of the insured buildings \$119,645,756, a total farm value of \$675,101,441. The loans therefore represent 45 per cent. of the bare land value and 37 per cent. of the total farm value.

The highest proportion of borrowing for the purchase of land was

in the eighth district, including Iowa, South Dakota, Wyoming, and Nebraska, where it was 25 per cent. The lowest was in the third district, including North Carolina, South Carolina, Georgia, and Florida, where it was only 4 per cent. This reflects the high price of lands in the greater part of the eighth district, and the general disposition toward the acquisition of these productive lands.

The highest percentage for buildings and improvements was in the third and fifth districts — the latter including the States of Alabama, Mississippi, and Louisiana — in both of which it was 14 per cent. The lowest was 3 per cent. in the Texas district. The high percentage in the third and fifth districts reflects the fact that in those sections farm buildings have been for many years below standard, and the farmers in those States are now taking advantage of the ability to borrow money at a reasonable rate and by improving their buildings are making farm life more attractive and farming operations more profitable.

The amount borrowed for the purchase of live stock varies from 7 per cent. in the ninth district, including the States of Kansas, Oklahoma, Colorado, and New Mexico, to 1 per cent. in the seventh district, including the States of Michigan, Wisconsin, Minnesota, and North Dakota. This reflects the fact that in portions of the ninth district — notably in Colorado and New Mexico — the attention of farmers in the last few years has been turned toward the raising of live stock rather than the raising of grain, while in the seventh district land is generally too valuable for cattle raising. The dairy herds of those States had become very highly developed before the institution of the farm loan system, and "cattle loans" are freely handled by commercial banks.

The proportion borrowed for the payment of previously existing mortgages varies from 66 per cent. in the New England district and Texas to 46 per cent. in the eighth district. The large proportion in the first district is probably due to several causes, one being the fact that the farm-mortgage business has not heretofore been developed in that section as it has been in other sections of the country, and that the farmers were uncertain as to the continuance or renewal of their mortgages, and therefore anxious to convert their indebtedness into a long-time amortized loan; another being the fact that during the last few years most of the New England savings banks, under pressure to subscribe for Government bonds and to finance the subscriptions of their depositors, were disposed to curtail rather than to extend their farm mortgages. The low percentage in the eighth district is doubtless due to the fact that the farm mortgage business had been more highly developed in that district than in any other, and the borrowers were able to get the lowest rates made in any large sections of the country. The amortization feature was their only inducement to convert their existing mortgages into mortgages under the farm loan system.

The proportion of amount loaned to bare-land value was highest in the New England district — 57 per cent. — and lowest in the ninth district — 41 per cent. The high proportion in the New England district naturally

results from the fact that in that section farm buildings are most substantial and of better class than in any other section, and represent a larger proportion of the total farm value. The low proportion in the ninth district is largely due to the fact that in some sections of that district, particularly on cattle ranches, the value of the buildings is almost negligible as compared with the total land value.

The proportion of amount loaned to total farm value varies very little in the different districts, ranging from 40 per cent. in the eleventh district, which includes the States of California, Utah, Arizona, and Nevada, to 34 per cent. in the New England district. The low proportion in the latter district is due to the provision of the Farm Loan Act allowing a loan of only 20 per cent. on the value of buildings alone, in connection with the fact already alluded to that in that district the buildings represent a larger proportion of the total farm value than in any other district. This limitation has operated to make the loan limit in that district materially less in many cases than the amount which local savings banks are willing to loan.

Loan applications cancelled or rejected are of interest for the purpose of determining the causes of the cancellation or rejection. It appears that of the 19,944 loans which have been examined, about 22 per cent. were withdrawn by the applicant before appraisal, 6 $\frac{1}{2}$ per cent. were rejected by the loan committee of the local association, 18 per cent. were rejected by the appraiser, 20 per cent. were rejected by the banks, 21 per cent. were cancelled by the applicant because he was unwilling to accept a loan in the amount offered, and 12 $\frac{1}{2}$ per cent. were rejected because they came through proposed associations to which the banks refused to grant charters.

The above paragraph shows the various stages between original application and final closing at which these loans fell. It is of further interest to note the various specific causes. Among those leading to withdrawal or refusal by the applicant were sale of the farm, inability to get a release from one or more existing liens, and refusal to accept the amount of loan offered by the bank. This last was, of course, the most general cause. Among the reasons for rejection by the loan committee was the poor credit or bad health of the applicant. Appraisers rejected because of the buildings being in poor condition, because of lack of stock or equipment, inaccuracy of survey, or insufficiency of water rights in irrigated districts. Cases of total rejection by the bank were due to the ineligibility of the borrower, defective title, and the fact that the purposes to which the loan was to be applied were not satisfactory.

§ 7. CORROBORATION OF APPRAISEMENTS.

The Board has felt that in the astonishingly small proportion of overdue payments by borrowers, and in the fact that up to date it has only been necessary for the banks to take two properties in foreclosure, there

was very good evidence of the conservative character of the loans that have been made. Within the last year, however, it has been possible to accumulate evidence on this point which is of the highest value. The very best possible test of the correctness of an appraiser's valuation of a farm is the price that someone is willing to pay it within a year or two afterwards. The Board has been able to secure from nine of the banks figures on nearly 2,200 farms on which they had made loans and which have since been sold. While these figures do not, unfortunately, include every sale, they do include, without selection or revision, every sale as to which the banks have been able to secure the information, and where any part of the consideration was "trade," this "trade" has been reduced to its cash value. There is every reason to believe them to be fairly representative. In at least one of the districts the sale prices are probably considerably understated, both buyer and seller having an inducement to such understatement, the buyer to avoid heavy local taxation in the future, and the seller to escape the payment of a heavy income tax on the profit which he had in the sale.

These figures tell their own story and require little comment. They show that in these 2,178 typical cases the loans made by the banks represented 39.98 per cent. of the farm values as determined by their appraisers, and 33.41 per cent of the farm values as determined by subsequent cash sales. They further show that these sales represented an advance of 19.46 per cent. over the appraisers' valuation. The great enhancement in farm values which has been a characteristic of the last year or two in the eighth land bank district is reflected in the fact that, while the loans on the 191 farms in that district which have since changed hands represented 43 $\frac{1}{2}$ per cent. of the valuations of the Federal appraisers in 1917 and 1918, they represented only 28 per cent. of the prices at which these farms sold in 1918 and 1919, the enhancement between the appraisal valuation and the sale price on these 191 properties having been nearly \$1,000,000, or over 50 per cent. A portion of this is no doubt to be ascribed to the conservatism of the original appraisements, but the difference between appraisements and sale prices, is much greater, both in proportion and in amount, in this district than in any other.

In the State of Montana the long-continued and destructive drought which has afflicted a great part of that State is reflected in sale values, which are about 4 per cent. below appraisements. The New England district is the only one in which sale prices are below appraisements for the district as a whole. This is evidence of the fact that in the greater part of that district there can scarcely be said to be any established farm values, or basis for determining them. In almost every other section of the country, land has a per-acre value, which is capable of pretty definite determination. No such thing is possible in New England, however. No two farms there are alike, and each one is bought or sold as a farm unit, and not on a per-acre basis. One farm is unsaleable because of its location on a back road or in an undesirable neighbourhood, while another farm is in demand because it has fine old buildings on it, or because it

has the happy combination of fields, meadow, and woodland, with a spring or running stream, which attracts the purchaser. The productivity of the soil is a minor consideration, and the number of acres included in the farm is of the least importance.

§ 8. GENERAL ASSISTANCE TO AGRICULTURE.

As managers of a great co-operative system operating under the auspices and to a certain extent with the assistance of the Federal Government, the offices of the Federal land banks have felt that their duties would be very incompletely performed if they confined themselves simply to the lending and collecting of money. They have believed that it was the intention of the Congress that the Federal farm loan system should be of help to the farmers in more ways than simply lending them money at a reasonable rate of interest. No effort has been made to duplicate at any point the educational efforts of the Department of Agriculture, but the banks have striven to drive home the truths which the Department of Agriculture has been teaching. There have been some very conspicuous illustrations of success along these lines.

In some districts the Federal land bank has encouraged the formation of such small co-operative units as buying and selling associations, breeding associations, co-operative creameries, cheese factories, condensing stations, and potato warehouses. They have encouraged the good roads movement by informing the members of farm loan associations that they look with disfavour upon loans in farms which do not have ready access to good roads, and where the cost of transporting products to market is therefore unreasonably high. In the summer of 1918 the Federal Land Bank of St. Paul wrote a circular letter to the secretary-treasurer of every association in western North Dakota, calling attention to the fact that, as a result of repeated crop failures caused by drought, the economic condition of the farmers in that part of the State was at that time very unfavourable. They then went on to call attention to the fact that there were many grasses and feed crops that could be depended upon in periods of drought as well as in normal years, and that instead of relying exclusively upon grains farmers should turn their attention to the raising of live stock and keeping milch cows on the farm, so as to have a dependable income in times of drought as well as in times of plenty. The letter concluded with the statement: "Hereafter we will only entertain applications from farmers who have shown from their farming operations in the past that they have a dependable income, and that they have live stock and dairy cows to assure this for the future. All loans that do not comply with these requirements will be rejected by us, because we do not consider them safe loans." There were a few protests, and hundreds of letters of commendation. Recent figures published by the State Agricultural College show that the dairy production of North Dakota increased 100 per cent. during the fiscal year 1918-19, this increase being particularly large in the

western half of the State, where the ruling of the Federal land bank was most rigidly applied. In one large farm loan association the secretary-treasurer, who is a banker, makes it a point to induce each prospective borrower to buy enough cows to give him a start in dairying. This secretary-treasurer has also gone into the sheep business in partnership with one of the members of the association, and these two men will bring in cattle and sheep and supply them to the neighbouring farmers at a very reasonable price. The records of the bank show that there has not been a single delinquency in this associations. This secretary-treasurer had been advocating diversified farming for 10 years, but never was able to get results until the ruling of the land bank gave him the leverage that he needed.

Another service of inestimable value that has been rendered to farmers is in the straightening out of their title to land. The chief attorney and assistant attorneys in the various banks devoting their entire attention to this subject have been able to develop a remarkable faculty for detecting and correcting title defects, and their time and experience have been made available to farmers at a charge for the determination of title so low that, in comparison with the value of the service rendered, this service may almost be said to have been rendered gratuitously. When an applicant for a loan sends in his abstract of title, and one or more defects are discovered, the papers are not returned to him with a memorandum "title defective." Either he or the abstractor who prepared the abstract for him is written to and told that to perfect the title it will be necessary to get an affidavit of such and such a character from A, or a certificate of birth or death or some other fact from B, or a waiver or release from C, and whatever else may be necessary. The result is that, practically without cost, thousands of farmers, who previously had no marketable title to their lands, and other thousands who did not know what kind of titles they had, have now been straightened out and put in a position where their farms are real assets, capable of being mortgaged or sold without title difficulty.

In those sections of the country, particularly in the South, where lands have suffered from erosion, the Federal land banks have insisted upon terracing as one of the conditions upon which they will make loans on rolling lands. Appraisers have been instructed particularly to note conditions in this respect, and where damage has already occurred, and this damage is likely to be increased, the bank not only insists that the borrower shall terrace, but also gets him in touch with the county agent, has him advised where and how to terrace, holds out a sufficient amount of money, and sees that the terracing has been done before this money is released.

While the Board and the officers of the banks have been careful to avoid any participation by the Federal land banks in land speculation, they have nevertheless been glad to participate in the acquisition of land by previously landless men, particularly where these men were either farm hands or tenant farmers, who knew farm life and farming methods, and

might reasonably be expected to make a success of farming operations on their own account. While the statistics on 83,826 loans, aggregating \$251,426,600, showed only 13 per cent. of this amount borrowed for the purchase of land, special records kept by the banks at the request of the Board during the month of October 1919, showed for that month that 16 per cent. of the loans went to the purchase of land, in almost every case for the purchase of land by a landless man.

§ 9. AMENDMENTS TO THE FARM LOAN ACT.

There were pending before the Congress at the date of the Report several bills embodying proposed amendments to the Farm Loan Act.

House Bill 9065 embodies certain changes which practical experience in the operation of the system has demonstrated to be desirable in the direction of eliminating expense and lost motion. Its provisions simplify the labours of the loan committee, make more definite provision for association funds and the compensation of secretary-treasurers, provide for a deputy registrar, and relieve the executive officers of the banks of some details which have involved delay.

House Bill 6861 provides for the payment of the salaries and expenses of the Farm Loan Board, and of the officers and agents of the bureau, by assessments upon the banks, instead of by appropriation of public funds. This is a change to which the Board had always looked forward; and while the Board had not intended to suggest it until a little later, this charge is one which the banks may readily assume from 1 July 1920.

Senate Bill 3109, repealing the tax exemption on bonds issued by joint-stock land banks.

§ 10. SERVICE AS AGENTS OF GOVERNMENT.

The Federal Land Banks of Wichita, Spokane, and St. Paul were designated as financial agents of the Government for the purpose of carrying out the order of the President in setting aside \$5,000,000 from his war emergency fund for the relief of farmers in certain drought-stricken areas, by way of loans for the purchase of seed grains.

Under the plan this task involved the taking from each borrower a note and mortgage upon the crop planted. In the discharge of this duty, loans were made by the Federal Land Bank of Wichita to the number of 8,402, in the amount of \$1,892,345; by the Federal Land Bank of Spokane to the number of 6,149, in the amount of \$1,949,934; and by the Federal Land Bank of St. Paul to the number of 1,137, in the amount of \$358,559, and collections are now being made on account by the several banks.

Part IV: Agricultural Economy in General

FRANCE.

THE INCREASE IN AGRICULTURAL WAGES FROM 1915 TO 1920.

SOURCE:

ENQUÊTES PRÉFECTORALES RÉSUMÉES DANS *La Main-d'œuvre agricole*, Paris, August and September 1920.

By the Law of 15 July 1914, the provisions of the Law of 9 April 1898 regarding accidents to workmen, were extended to forestry undertakings and for the carrying out of these provisions, all Prefects were requested by a Decree of 27 May 1915 to fix by order the average amount of the wages of agricultural labourers, which amount should serve as a basis for the determination of the compensation due to injured labourers or to their heirs in case of death resulting from their injuries.

In view of the application of the law, which came into force on 1 September 1915, this determination was made for the first time in 1915, then in 1918 1919, and lastly in 1920.

The Decree of 27 May 1915 determined the procedure to be adopted for the fixing of wages.

It may be useful to reproduce Articles 1 and 2 of this decree in order to indicate the sources of the information furnished for the drawing up of these orders.

“ Art. 1. — The prefect of each department shall consult a mixed commission composed of an equal number of employers and labourers, and an administrative enquiry shall be made, in the course of which all needful information shall be collected from the agricultural syndicates both of employers and workmen, from the directors of agricultural services and from other competent persons, after which the prefect shall determine the average amount of the wages of paid agricultural labourers, and on the basis of this amount shall be calculated the pensions or compensation due, in case of accidents in the course of their work, to employés or workmen in forestry undertakings who are not paid by the manager of the undertaking or have no fixed wages, or to the heirs of such employés or workmen.

“ The average wages thus determined may be revised at the request of employers or labourers, when variations in the rate of wages of paid

agricultural labourers shall have generally prevailed in the department. This revision shall be made under the conditions fixed in the first paragraph of this article.

" Art. 2. — Provisionally and until the instructions in the preceding article shall have been carried out, the average amount of wages to serve as a basis for the calculation of pensions and compensation shall be determined by the prefect after consultation with the director of agricultural services. "

It will be seen by reading these articles that the determination of wages has never been left to the arbitrary decision of officials, but entrusted to specialists or professionals.

It was necessary to establish this point before touching on the comparison of wages according to the prefectorial enquiry.

Here follow particulars according to departments :

Ain — Average annual wages.

1915	1,200 fr.
1918-1919	1,800 fr.

Increase of 1919 over 1915 : 50 per cent.

Aisne. — Average annual wages :

1915	1,275 fr.
1920	4,140 fr.

Increase of 1920 over 1915 : 240 per cent.

Allier. — Average daily wages :

1915	3.55 fr.
1918	6.50 fr.
1919	10.00 fr.

Increase of 1919 over 1915 : 180 per cent.

Basses-Alpes. — Average daily wages :

1915	2.50 fr. in winter to 5 fr. in summer.
1920	9.00 fr. in winter to 12 fr. in summer.

Increase of 1920 over 1915 : winter, 260 per cent. , summer, 140 per cent.

Hautes-Alpes. — Average daily wages :

1915	4.50 fr.
1918	6.00 fr.
1920	10.00 fr.

Increase of 1920 over 1915 : 120 per cent.

Alpes-Maritimes — *Average daily wages :*

1915	3.00 fr. winter ; 3.50 fr. summer.
1918-1919	3.50 fr. winter ; 6.00 fr. summer.
1920	9 60 fr. winter ; 11.25 fr. summer.

Increase of 1920 over 1915 : winter, 220 per cent. ; summer, 220 per cent.

Ardèche. — *Average daily wages :*

1915	3 fr.
1918	5 fr.
1920	9 fr.

Increase of 1920 over 1915 : 200 per cent.

By the prefectorial order of 10 February 1920 the annual wages were 2,500 francs.

Ardennes. — No order was made in 1915 and 1918, because of the German occupation.

In 1920 the average rate of wages of employes and labourers in forestry undertakings was thus fixed :

- 4.50 fr. per day if the wage-earner is fed, lodged and maintained.
- 9 fr. per day if he feeds, lodges, and maintains himself.

Ariège. — *Average annual wages (300 days of work) :*

1915	1,125 fr.
1918-1919	1,800 fr.
1920	2,400 fr.

Increase of 1920 over 1915 : 110 per cent.

Aube. — *Average annual wages :*

1915	1,350 fr.
1918	1,650 fr.
1920	3,000 fr.

Increase of 1920 over 1915 : 120 per cent.

Aude. — (1) 1915. — The average amount of wages of agricultural labourers is fixed as follows :

From 1 November to 31 January : 3 fr. per day

From 1 February to 31 October : 4 fr. and two litres of wine ;

Harvest time : 5 fr. per day and 3 litres of wine.

Women's wages are half the amounts above-mentioned.

(2) 1918-1919 :

From 1 November to 1 January : 2 to 3 fr. (with wine and food in addition).

Winter, 5 to 6 fr. ; summer, 6 to 7 fr. (without food).

(3) 1920 :

From 1 November to 1 March : 9 fr. per day and 1 litre of wine.

From 1 March to 31 October : 10 fr. per day and 2 litres of wine.

Overtime is paid at the rate of 1.75 fr. per hour.

Women's wages are half the amounts above-mentioned.

Aveyron. — (1) 1915. The daily wages of the workmen named below are thus fixed :

Wood cutters: winter, 3 to 5 fr. ; summer, 5 fr. to 6 fr.50. Sawyers: winter, 5 fr. to 6.50 fr. ; summer, 6 fr. to 7.50 fr. Charcoal burners: winter, 4.50 fr. to 6 fr. ; summer, 6 fr. to 7.50 fr. (Duration of labour in 1915 : wood cutters and charcoal burners, 6 to 8 hours per day ; sawyers, 7 to 8 hours in winter ; 10 to 11 hours in summer. If the labourer be fed his wages are diminished by 1.50 fr.).

The annual wages are fixed at 1,575 francs.

(2) 1919. — The annual wages are fixed at 2,200 fr., an increase of 30 per cent. over 1915.

(3) 1920. — The same annual wages as in 1919.

Bouches-du-Rhône :

(1) 1915. — *Daily wages :*

Wood cutters and faggot binders	6.00 fr.
Gardeners	4.25 fr.
Day labourers	3.50 fr.
Faggot binders (women)	2.80 fr.

Annual wages :

Wood cutters	1,400 fr.
Gardeners	1,440 fr.
Labourers lodged and fed	600 fr.
Carters lodged and fed	720 fr.
Carters, foresters lodged and fed	1,000 fr.
Shepherds lodged and fed	685 fr.
(2) 1916 — <i>Annual wages</i>	1,200 fr.
(3) 1919 — <i>Annual wages</i>	2,400 fr.
(4) 1920 — <i>Annual wages</i>	3,600 fr.

That is to say an increase of 200 per cent. as compared with 1916.

Calvados. — *Daily wages :*

1915. — 4.75 fr.

1918-19 from 10 June to 30 September, 3.50 fr. to 5 fr. ; from 1 October to 15 November, 2.50 fr. to 4 fr. ; from 1 March to 10 June, 2.50 fr. to 4 fr. ; winter, 2 to 3 fr.

1920. — From 1 October to 31 May, 10 fr., food being counted as 5 fr. in this sum; from 1 June to 30 September, 13 fr., food being counted as 5 fr. in this sum.

Cantal. — *Annual wages* :

1915	1,050 fr.
1918-19	1,800 fr.
1920	1,800 fr.

The increase of 1920 over 1915 amounts to 70 per cent.

Charente. — *Daily wages* :

1915	3 fr.
1918	6 fr.
1920	10 fr.

Increase of 1920 over 1915: 233 per cent.

Charente-Inférieure. — *Daily wages* :

1915. — Summer, 3 fr.; winter, 2.50 fr.

1918. — Summer, 3 fr.; winter, 2.50 fr.

1919. — For the whole year, 9 fr.

Increase of 1919 over 1915: 227 per cent.

Cher. —	<i>Daily wages.</i>	<i>Annual wages</i>
1915	4.45 fr.	1,620.00 fr.
1920	10.30 fr.	3,761.75 fr.

Increase of 1920 over 1915: 130 per cent.

Corrèze. — *Daily wages* :

1915	3.75 fr.
1918	7.50 fr.
1920	14.00 fr.

(Food is valued at 5 fr. and is deducted when the case requires).

Increase of 1920 over 1915: 170 per cent.

Corsica : — *Daily wages* :

1915	3 fr.
1918-19. — Agricultural labourers. . . .	7 fr.
Gardeners	8 fr.
Haymakers	14 fr.

Côte-d'Or. — *Daily wages* (labourers not fed).

1915. — Men, 4 fr.; women, 2.50 fr.

1919. — Men, 6 to 7 fr.; women, 4 to 5 fr.

1920. — Men, 9 to 10 fr.; women, 7 to 8 fr.

Increase of 1920 over 1915: men 125 to 150 per cent.; women 180 to 220 per cent.

Côtes du Nord. — *Daily wages :*

1915. — Summer ; agricultural labourers	{ men	2.50 fr.
	{ women	2.00 fr.
gardeners		3.50 fr.
Winter ; agricultural labourers .	{ men	3.00 fr.
	{ women	2.50 fr.
gardeners		3.00 fr.
harvesters		4.00 fr.
haymakers		3.00 fr.
1918. — Average annual wages		1,300 fr.
1920. — Average annual wages		2,100 fr.

Creuse. — *Daily wages :*

1915. — Labourers receiving food : men, 2.50 fr. ; women, 1.40 fr. ; children 0.75 fr.
 Labourers not receiving food : men, 4 fr. ; women, 2.20 fr. ; children, 1 fr.

1918. — Average wages, 6 fr.

1920. — Average wages, 10 fr.

Dordogne. — *Daily wages :*

1915. — 4 fr. (without food).

1920. — 8 fr. (without food).

Increase of 1920 over 1915 : 100 per cent.

Doubs. — *Daily wages :*

1915	4 fr.
1918	8 fr.
1920	11 fr.

Increase of 1920 over 1915 : 175 per cent. ' .

Drôme. — *Daily wages :*

1915. — Labourers fed : winter, 1.50 fr. ; spring and autumn, 2.50 fr. ; summer, 2 to 2.50 fr. ; threshing and harvesting, 4 to 5 fr. ; haymaking, 4 to 5 fr.

Labourers not fed : winter, 2.50 fr. ; spring and autumn, 3.50 fr. ; summer, 3.50 fr. ; threshing and harvesting, 5 to 6 fr. ; haymaking, 5 to 6 fr.

1918. — Labourers fed, winter 5 fr. ; spring and autumn 8 fr. ; harvesting and threshing, 15 fr.

Labourers not fed : winter, 9 fr. ; spring and autumn, 12 fr. ; summer, 16 fr.

1920. — No change since 1918.

Eure. — *Daily wages :*

1915	3.20 fr.
1918	4.75 fr.
1920	6.00 fr.

Increase of 1920 over 1915: 87 per cent.

Eure-et-Loir. — *Daily wages :*

1915	4 fr.
1918	5 fr.
1920	8 fr.

Increase of 1920 over 1915: 100 per cent.

Finistère. — *Daily wages :*

1915	2.25 fr.
1918	6.80 fr.
1920	8.00 fr.

Increase of 1920 over 1915: 140 per cent.

Gard. — *Daily wages :*

1915	5 fr.
1918	8 fr.
1919	12 fr.

Haute-Garonne. — *Average wages :*

1915	3.50 fr. per day.
1918	6 fr. per day or 1,800 fr. per year.
1920 : same figures as for 1918.	
Increase of 1920 over 1915: 75 per cent.	

Gers. — *Average wages :*

1916	1,000 fr.
1918	1,800 fr. (day-labourers).
	2,600 fr. (foremen).
1920	1,400 fr. (labourers not receiving food).
	10 fr. per day (labourers not receiving food).

Gironde. — *Average wages :*

1915. — Daily wages: 5 fr.	
1918. — Annual wages: man, 3,600 fr.; woman, 1,800 fr.	
1920. — Annual wages: man, 4,200 fr.; woman 2,800 fr.	
Increase of 1920 over 1915: men, 16 per cent.; women, 55 per cent.	

Hérault. — *Average daily wages:*

1915	4 fr.
1919	6 fr.
1920	12 fr.

Increase of 1920 over 1915: 200 per cent.

Ille-et-Vilaine. — *Average daily wages.*

1915	3.65 fr.
1918	6.50 fr.
1920	10.50 fr.

Increase of 1920 over 1915: 180 per cent.

Indre. — *Daily wages:*

	1915	1918	1920	Increase of 1920
June to October . .	4.00 fr.	7 fr.	13 fr.	225 %
March-April	3.50 fr.	5 fr.	11 fr.	210 %
October-November . .	3.50 fr.	5 fr.	11 fr.	210 %
December to February.	3.00 fr.	5 fr.	9 fr.	200 %

Indre-et-Loire. — *Average annual wages:*

1915	1,300 fr.
1920	3,500 fr.

Increase of 1920 over 1915: 169 %.

Isère. — *Average daily wages:*

1915	3.60 fr.
1918	9.00 fr.
1920	11.00 fr.

The year is counted as 250 working days.

Increase of 1920 over 1915: 200 per cent.

Jura. — *Average daily wages:*

1915	4 fr.
1919	6 fr.
1920	10 fr.

Increase of 1920 over 1915: 150 %.

Landes.

1915. — Daily wages: 3.15 fr.; annual 800 fr. (This figure represents a fixed sum, besides certain advantages converted into money, such as lodging, garden, small field).

1918. — Daily wages, 5 fr.; annual, 1,400 fr.

1920. — Daily wages, 8.50 fr. (without food); 4 fr. (with food); annual, 2,500 fr.

Increase of 1920 over 1915: 100 per cent. on daily wages; 200 per cent. on annual wages.

Loir-et-Cher. — *Average daily wages:*

1915	3.40 fr.
1918	9.00 fr.
1920	10.50 fr.

Increase of 1920 over 1915: 200 per cent.

Loire. — *Average daily wages:*

1915	4.50 fr.
1918-19.	8.00 fr.
1920	10.00 fr.

Increase of 1920 over 1915: 120 per cent.

Haute-Loire. — *Average daily wages:*

1915	3.75 fr.
1918-19	6.00 fr.

Increase of 1918 over 1915: 60 per cent.

Loire-Inférieure:

1915.	3.65 fr. per day, or 1,005 fr. per annum.
1918-19	6.00 fr. per day, or 1,800 fr. per annum.
1920.	2,700 fr. per annum.

Increase of 1920 over 1915: 145 per cent.

Loiret. — 1916. — Average annual wages: 750 fr., not including cost of food and lodging, which devolves upon the employer.

1918. — 1,300 fr. (as above).

1920. — 1,800 fr. (as above).

Increase of 1920 over 1916: 140 per cent.

Lot.—1915. — Annual wages: adults, 1,000 fr.; labourers under 18 years of age, 730 fr.

1920. — Daily wages: winter, 4 fr. per day besides food; 8 fr. per day without food. — Summer, 6 fr. per day besides food; 12 fr. per day without food.

Lot-et-Garonne.

1918-19:	With food	Without food
Winter	3 fr.	8 fr.
Summer.	6 fr.	10 fr.
1920:		
Winter	5 fr.	9 fr.
Summer.	8 fr.	13 fr.

Increase of 1920 over 1918-19: winter, 12 per cent.; summer, 30 per cent.

Lozère. — *Daily wages* :

1915	3 fr.
1920	11 fr.

Increase of 1920 over 1915: 260 per cent.

Maine-et-Loire. — *Daily wages* :

1915	3.50 fr.
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1920. — 1st. From 1 November: 8 to 10 fr. without food, or 5 to 6 fr. with food.

2nd. — From 1 November to 1 March, about 1 fr. less for each working day.

3rd. — In the vineyards from March to November, 7 to 8 fr. for labourers receiving food, and 11 to 12 fr. for those not receiving food.

Manche. — *Daily wages* :

1915	3 fr.
1918-19	7 fr.

Increase of 1918 over 1915: 133 per cent.

Marne.

1915. — Woodcutters	4 fr. per day
Pruners	8 » »
Charcoal burners	5 » »
Sawyers and splitters	5 » »
Journeyman	4 » »
Assistants	3 » »

1918-1919. — Annual wages: 2,200 fr.

1920. — Average daily wages: 15 fr.

Haute-Marne. — *Daily wages*.

	1915	1918-1919	1920
Men	3.25 fr.	7.00 fr.	12.00 fr.
Women	1.75 fr.	5.00 fr.	9.00 fr.
Youths	1.75 fr.	4.50 fr.	8.50 fr.

Increase of 1920 over 1915 :

Men	260 per cent.
Women	410 per cent.
Youths	380 per cent.

Mayenne. — *Daily wages :*

1915	3.50 fr.
1918	6.00 fr. (comprising food).
1920	7.50 fr. (comprising food).

Increase of 1920 over 1915 : 110 per cent.

Meuse. — *Daily wages :*

	Men	Women
1915	3.50 fr.	1.75 fr.
1918	6.00 fr.	3.00 fr.
1919	10.00 fr.	5.00 fr.

Increase of 1920 over 1915 :

Men	185 per cent.
Women	340 per cent.

Morbihan. — *Average annual wages :*

1915	825 fr.
1920	2,750 fr.

Increase of 1920 over 1915 : 230 per cent.

Nièvre. — *Daily wages :*

1915. — From November to March, 1.50 fr. to 2 fr.; in March and April, from 2.50 fr. to 3 fr.; from May to August, 3 to 5 fr.; in September and October, from 3 to 4 fr.

1918	5 fr.
1920	12 fr.

Increase of 1920 over 1915 : 140 per cent.

Nord :

1915. — Daily wages	3.40 fr.
Annual wages.	1,050 fr.

1920. — Daily wages 12 fr.

Increase of 1920 over 1915 : 250 per cent.

THE INCREASE IN AGRICULTURAL WAGES 1915 TO 1920 OVER

Oise Daily wages

1915

1918-19

1920

Increase of 1920 over 1915 3 1 1

Oise — Daily wages

1915 — Summer 3 75 fr without food 1 1 1

1918 — Summer 5 50 fr without food 1 1 1
6 50 fr without food or 3 50 fr with food

1920 — From 1 April to 30 Sept 1 1 1
with food, from 1 October to 31 Dec, 1 1 1
with food

Increase of 1920 over 1915 (wages 1 1 1)
220 per cent, winter, 200 per cent

Pas-de-Calais

1915 Annual wages

1920 Daily wages

Puy-de-Dôme

1915 Annual wages 1 1 1

1918-19 Daily wages

1920 Annual wages 1 1 1

Increase of 1920 over 1915 1 1 1

Bas-Pyrénées

1915 — Daily wages 2 50 fr (with food)

1918-19 Daily wages Summer 3 1 1 without food, winter, 5 fr without food or 3 fr with food

1920 — Annual wages 2,500 fr without food or 3 000 fr with food

Hautes-Pyrénées Daily wages

1915 3 fr

1918-19 — Agricultural labourer 5 fr (he and food), woodman 6 55 fr per hour

Increase of 1918-19 over 1915 60 per cent

Pyrénées-Orientales:

1915. — Annual wages (300 days): 1,200 fr.

1918. — Daily wages: 1st. district, various crops: men, 6 to 7 fr.; women, 3 to 4 fr.; reapers and mowers, 8 to 10 fr.; men who bark cork trees (July-August), 10 to 12 fr.

2nd. district, vine-growing, work in vineyards: men, 8 to 9 fr. with wine, or 10 to 11 fr. without wine; women, 3.50 fr. to 4 fr.

Vintage: men, 10 to 18 fr. besides wine valued at 2 fr.; women, 8 to 10 fr.

Yearly wages (300 days): 1,200 fr.

1920. — Daily wages: 1st district, various crops; men, 10 to 12 fr.; women 5 to 6 fr.; reapers and mowers, 16 to 20 fr.; barkers of cork trees (July-August) 12 to 16 fr.

2nd. district, vine-growing, work in vineyards: men, 16 to 18 fr. and 2 litres of wine; women, 6 fr. and 1 litre of wine.

Vintage: men 16 to 18 fr. and 2 litres of wine; women, 8 to 9 fr. and 1 litre of wine.

Haut-Rhin:

	Daily wages	Annual wages
1915	4.50 fr.	1,600 fr.
1918	6.50 fr.	2,300 fr.
1920	12.00 fr.	4,300 fr.

Increase of 1920 over 1915: 160 per cent.

Rhône:

1915. — (1) *Daily wages*:

Mountain district. — Summer, 2.50 to 4 fr.; winter, 2 fr. to 2.50 with food.

Vineyards: summer, 2.50 fr. to 5 fr.; winter, 3 to 4 fr. with wine.

Round the centres: men, 40 to 50 centimes per hour; women, 25 to 40 centimes per hour.

(2) *Annual wages*:

Servants under 20 years of age, fed and lodged:

Men	300 to 500 fr.
Women	200 to 350 fr.

Servants above 20 years of age, fed and lodged :

Men	150 to 200 fr.
Women	150 to 200 fr.

1918. — It was not possible to fix an average rate.

1920. — Average daily wages; 18 fr.

Haute-Saône. — *Daily wages :*

	1915	1918
Men.	3.00 fr.	5.00 fr.
Women	3.00 fr.	3.00 fr.
Boys	3.00 fr.	3.00 fr.
Girls	2.25 fr.	2.25 fr.

Increase 60 per cent.

Saône-et-Loire. — *Average daily wages:*

1915	3 50 fr.
1918-1919.	8.00 fr.
1920	10.00 fr.

Increase of 1920 over 1915: 180 per cent.

Sarthe. — *Average daily wages :*

1915 (labourers without food) : summer, 3.75 fr. ; winter, 2.50 fr.
 1918 (labourers without food) : summer, 4.50 fr. ; winter, 3 fr.
 1919 (labourers with food) : summer, 5 fr. ; winter, 3 fr.
 (labourers without food) : summer, 7.50 fr. ; winter, 5 fr.
 1920 : 10 fr.

Savoie. — *Average daily wages :*

1915	5.00 fr.
1918-19	7.50 fr.

1920 : winter, 12 fr. ; summer, 18 fr. ; average for the year, 15 fr.

Increase of 1920 over 1915: 275 per cent.

Haute-Savoie. — *Average daily wages .*

1915	3.50 fr.
1918-19 (labourers with food).	3.50 fr.
(labourers without food).	8.50 fr.
1920 (labourers with food).	4.00 fr.
(labourers without food)	10.00 fr.

Increase of 1920 over 1915: 180 per cent.

Seine.

Gardeners, foremen, 2.50 fr. per hour. — Labourers, 2.50 fr. — Pruners, 3.50 fr. — Wood cutters 2.50 fr. — Mowers, 2.50 fr. — Weedeis, 2 f. an hour. — Carters in charge of one horse, 2} fr. a day. -- Carters with two horses, 24 fr. a day.

Seine-Inférieure. — *Average daily wages :*

1915 :

	Summer —	Winter —
Men.	3.10 fr.	3.50 fr.
Old men (65 years) women and apprentices (14 to 17 years). . .	2.25 fr.	2.50 fr.
1918-1919 :		
Men	6.50 fr.	5.00 fr.
Old men (65 years), women and apprentices (14 to 17 years) . .	3.00 fr.	4.50 fr.

In the figures for 1918-19 food is included and valued at 2.50 fr. for men, and 2 fr. for old men, women and apprentices.

Seine-et-Marne. — *Average daily wages :*

1915.	4.50 fr.
1918.	6.50 fr.
1920.	15.00 fr.

Increase of 1920 sur 1915: 230 per cent.

Seine et-Oise. — *Average daily wages :*

1915.	4.00 fr.
1918-19	7.50 fr.
1920.	12.00 fr.

Increase of 1920 over 1915: 200 per cent.

Deux-Sèvres :

1915. — Daily wages : men, 4 fr. ; women, 1.50 fr.
 1918-19. — Yearly wages : men, 2,400 fr. ; women, 1,200 fr.
 1920. — The same figures as in 1918-19.

Somme. — *Average daily wages :*

1915.	3.25 fr.
1918-19 : from 1 May to 30 September . .	8.00 fr.
from 1 October to 30 April. . .	6.50 fr.
1920	11.65 fr.

Increase of 1920 over 1915: 250 per cent.

Tarn. — *Average daily wages :*

1915 : men, 3.50 fr. ; women, 2.35 fr.

1919 : men, 6.00 fr. ; women, 4.00 fr.

1920 : men, 10.00 fr. ; women, 6.00 fr.

Increase of 1920 over 1915 : men, 180 per cent. ; women, 150 per cent.

Tarn-et-Garonne. — *Average daily wages :*

1915 :

Spring 2.75 to 3.50 fr.

Summer. 3.50 to 5.00 fr.

Autumn. 2.25 to 2.50 fr.

Winter 2 fr.

1918-1919. — Woodcutters, 6 fr.

Other agricultural labourers, 5 fr.

1920. — Woodcutters, 8 fr.

Other agricultural labourers, 12 fr.

Var. — *Average daily wages :*

1915 4.50 fr.

1918-1919 10.00 fr.

1920 12.00 fr.

Increase of 1920 over 1915 : 160 per cent.

Vaucluse. — *Annual wages :*

1915 : 960 fr. to 1,080 fr. (neither fed nor lodged) — 600 fr. (fed and lodged).

1918-1920. — 1,920 fr. to 2,160 fr. (neither fed nor lodged). — 100 fr. per month, lodged and fed, in summer ; 70 to 80 fr. per month, lodged and fed, the rest of the year.

Vendée. — *Average daily wages :*

1915 2.50 fr.

1918. 4.00 fr.

1920 7.50 fr.

Increase of 1920 over 1915 : 200 per cent.

Vienne. — *Average daily wages :*

1915 4 fr.

1918-19. 4 fr.

Haute-Vienne. — *Wages in 1920.*

Summer season (April-October): men not fed, 10 fr. per day;
 men fed, 150 fr. per month;
 women not fed, 5 fr. per day;
 women fed, 70 fr. per month.

Winter season (November-March): men not fed, 6 fr. per day;
 men fed, 90 fr. per month;
 women not fed, 3 fr. per day;
 women fed, 50 fr. per month;
 children fed, 25 fr. per month.

Vosges:

1915. — Annual wages: 1,200 fr.

1918-1919. — Annual wages: Woodcutters 2,000 fr.
 Carters.. . . . 2,200 fr.
 Labourers. 1,600 fr.
 Sledge drivers. 2,800 fr.

1920. — Daily wages: 14 fr.

Yonne. — *Annual wages:*

1915 1,200 fr.
 1918-19 1,500 fr.

1920: 2,000 fr. with food or 3,800 fr. without food.

As will be easily seen, the data obtained by prefectorial enquiry cannot always be compared. For instance, the enquiry conducted by the prefect of Vosges gives the *annual* wages for 1915, and 1918-19, and the *daily* wages for 1920. For Haute-Vienne, we only know the wages of 1920, for Vienne on the contrary these are not given. But on the whole it seems clear that wages have scarcely trebled, and that even the wages of servants lodged and fed have little more than doubled. If we observe that the cost of living has more than quadrupled since 1914 (the index of wholesale prices being 100 for July 1914, it reached 432 at the end of 1919), we shall see that the rate of agricultural wages has not risen in proportion to the cost of living.

ITALY.

THE NEW TENDENCIES IN THE RECENT CHANGES
IN AGRICULTURAL AGREEMENTS.

SOURCES (OFFICIAL):

DUE RILAZIONI AL COMITATO TECNICO DELL'AGRICOLTURA. 1. LE AGITAZIONI DEI CONTADINI NELL'ITALIA SETTENTRIONALE E CENTRALE E LA RIFORMA DEI PATTI AGRARI, DEL PROF. A. SERPIERI. 2. CONTRO LA VIOLAZIONE DEI CONCORDATI COLLETTIVI, DEL PROF. L. BARASSI. Ministero di Agricoltura. Direzione Generale dell'Agricoltura, 1920.

The agitation among the peasants on the subject of agricultural agreements, carried on of late with unwonted intensity and on an unprecedented scale in Italian country districts, more especially in Northern Italy, made an examination into existing agreements not only desirable but urgent. The late Minister of Agriculture therefore nominated, from among the members of the Technical Committee of Agriculture, a Commission to enquire into the subject of a reform of agricultural agreements. Prof. A. Serpieri, one of the most competent and authoritative writers on rural economy, was requested by this Commission to investigate the agrarian agitation in Northern and Central Italy, and to draw up a statement on the subject. This important report has been recently published, and though the chapters devoted to the explanation of the questions at issue, and of the labour contracts, are to some extent out of date now that some months have elapsed, that new agitations have taken place and that new agreements have been entered into, yet the observations of the author on the new tendencies in the reform of agricultural agreements, and on what should be the action of the State with regard to them, have lost nothing of their actuality. We now give the chief points.

§ 1. THE VOCATIONAL ORGANISATION OF THE PEASANTS AND THE DEMAND
FOR HIGHER REMUNERATION.

The first general tendency is towards the vocational organization of the peasants. This is the aim, not only of agricultural labourers, but also of those peasants who are bound by agricultural agreements. Consequently, even among the latter we observe a tendency towards collective rather than individual agreements. Not only are working hours and rates of wages discussed by the "leagues," but also the conditions of produce-sharing and other small tenancies, etc. Nevertheless, the greater number of these leagues, of these vocational unions among peasants, small tenants, etc. — whether alone or in conjunction with other classes of peasants — is still in the primitive stage, and there is also but little cohesion among the associations of employers.

Among the many demands put forward by the various classes of peasants there is a general tendency to claim higher remuneration for their services. On this subject the author observes that for those categories paid entirely or for the most part in money the necessity arises to adapt the wages to the higher cost of living; that is to obtain "real" wages at least not inferior to those of former times. During the war this object was attained generally with facility, often without recourse to agitation or strikes: "to satisfy such demands farmers had a sufficient margin of profit owing to the increased prices of produce." But the peasants did not always stop at these limits. Indeed, the acquisition of "real" wages equal to those of pre-war times represented, so to speak, a minimum, followed often by other claims in the agitation of the year; claims essentially inspired by the idea of absorbing to their own advantage and to the largest extent possible, the increase in the net profit in money extracted from the land by reason of the very high prices of agricultural produce.

In many cases wages had already risen in a proportion higher than the increased cost of rural life. But while in the case of day labourers the doubt may arise as to whether the increase of yearly income corresponds to the increase in the cost of living, on account of the possibility of not being fully employed, such a doubt does not exist with regard to produce-sharing and other small tenants whose yearly income is constituted from the produce of the land. Their return in money, in fact, increased automatically in the same ratio as the prices of produce, which, wholesale, may be said to represent an increase equal to or even greater than the increase in the cost of rural life, and yet these classes of peasants were agitating to obtain more favourable agreements. For those paying small money rents the law intervened, permitting only to a limited extent any increase of rent.

The example of the small tenants who organized themselves in Emilia, Lombardy, etc., to check the increase of rent, was followed by the produce-sharing tenants, who showed a tendency to be dissatisfied with such an increased return as for them is involved in the higher price of produce. These also desire that the increased net profit in money should be divided in a proportion more favourable to the tenant than heretofore. This demand is, however, not always made explicitly, but rather in an indirect or concealed form; they request, for instance, the suppression of certain clauses still existing in some agreements respecting produce-sharing tenancies drawn up rather in the spirit of the relations between master and servant than of those between contracting parties, or they require that certain unpaid services of the tenant should be abolished. Also if the agreement respecting produce-sharing admits of the division of certain produce by giving less than half to the tenant they appeal to the principles of the best known and most classic form of produce-sharing — the metayer system of Tuscany — as requiring that all produce should be shared equally. Should the agreement admit of it, the tenant demands more than half; and if firmly resisted on this point, he then demands modifi-

cation of the agreement which for him will assure financial benefits identical and even more certain, for example the abolition of rent for his house and of his obligation to pay taxes, and a smaller share in certain expenses.

The tendency to demand higher remuneration for agricultural labour is complicated in the case of wage-earners by the demand for shorter hours of work. This demand, which is accentuated by unemployment amongst the day-labourers, and the consequent desire to give a greater number of persons a share in the work available, takes various forms, some of which are in direct opposition to the technical necessities of production, and nearly all of which would result in a further increase in the cost of labour. The increase is thus nearly always greater than that which would result from comparing rates of wages. The divergence becomes much greater if we consider the amount of work done in a unit of time. From the evidence collected it appears that this is the darkest point of the present situation of paid agricultural labour: the absolute want of willingness to work with alacrity and diligence. The effects of this are more serious in agriculture than in any other industry, supervision and the control of the work done being exceedingly difficult and ineffectual.

§ 2. THE DESIRE TO CONTROL THE MANAGEMENT OF THE LAND.

Besides the demand for higher pay for services rendered, another desire, still more remarkable, has manifested itself widely among the peasantry; the desire to assume, or at least, to control the management of the land. This control may take various forms which arouse the keenest interest.

Thus within the limits of agreements respecting produce-sharing, we must observe the various attempts made, and the agreements arrived at, to limit the absolute power of the landowner in the management of the land. The author observes that in the abstract a foundation of right cannot be denied to these efforts of the peasants, since their remuneration is affected by every error of management, and more particularly, since an innovation may prove to the advantage of the landowner by increasing the returns from the land, and injurious to the peasant by reducing the rate of remuneration. But in practice it seems difficult to work a system "in which the manager is deprived of that liberty and rapidity of decision in which consists the great superiority of private undertakings."

But this desire to control the working of the land is manifested in another and still more decided form where a large and pugnacious set of day labourers wishes to keep wages high, and at the same time is in fear of being unemployed. Since according to obvious economic laws high wages are often followed by a reaction and reduced employment, the peasants have succeeded in many cases in imposing not only a fixed rate of wages but also the employment of a fixed number of labourers, placing at the same time restrictions on the employment of labour-saving machinery. The

farmer is thus bound to pay a specific sum annually in wages, which is not determined by his free judgement as to the proper proportion of wages to other expenses, but is fixed by collective agreement.

Even where this point is not reached, there is a strong tendency to take the technical direction and organization out of the hands of the farmer and transfer them to the decision of arbitrators, or even of public authorities. This occurs especially where they may have an influence over the greater or lesser employment of human labour per unit of area.

It seems to the author of the report that all these limitations which tend to restrict the action of the private employer, if applied to agriculture, can have but one result, viz., the transfer of the whole undertaking into the hands of the labourers.

§ 3. THE TENDENCY ON THE PART OF THE PEASANT TO ASSUME THE MANAGEMENT OF THE LAND.

The tendency to a partial assumption of the management appears in the change from mere wage-earning to sharing in the profits. It is manifest in agricultural agreements, those approaching more nearly to mere wage-earning being converted into agreements whereby the peasant receives one third of the produce, but in the great farms of Emilia it is still more widely apparent in the substitution of "partitanze" for fixed wages (1).

These changes are not unfrequently hindered by the peasants' organizations which are socialist in character. These show the opposite tendency, viz., to substitute wages pure and simple for even the present produce-sharing system.

The tendency among peasants to assume the whole management is still more widely diffused, under the form of rent-paying tenancy or the actual acquisition of the land. The transfer of property is taking place on a large scale, but in a measure varying in different parts of the country (seldom in Central Italy, more frequently in the north): it generally occurs in single instances, by the sale of land to individual peasants, although in the last few years the purchases of land by peasant co-operative societies have been very numerous.

Attention should be called to the increasing number of peasants who rent land, though this also varies in different districts (many in North Italy, few or none in central Italy), and occurs more frequently where the produce-sharing system exists, and where in consequence the system of land tenure readily admits of letting a holding to a peasant family. In a less degree it is taking place, by means of collective leases (*affittanze*) where holdings are large, but here also the wage-earners rise co-operatively

(2) The "partitanza" is an agreement drawn up between the manager of the holding and a labourer or group of labourers for carrying out a fixed system of cultivation, by which he or they engage to perform all the necessary work, receiving in payment a share of the produce.

to the position of managers. Here and there an attempt manifests itself — for instance the region of the great irrigated farms of Lombardy — to pause at an intermediate solution, viz., an arrangement by which the owner, the large tenant and the labourers are associated in the undertaking, so far as to participate according to fixed shares in the profits after a certain remuneration has been set aside for manual labour, for management, for working capital and for the land.

With regard to the assumption of the management by the peasant it is observed that where it occurs most frequently it is the produce-sharing agreements or the mixed agreements for produce-sharing and renting which are most frequently converted into agreements for letting at a money rent.

In these changes one fact is particularly deserving of attention; the agreements, instead of being made with individuals as has hitherto been usually the case, are tending to become collective, so that by opposing to the landowners, not individual peasants requiring small patches of ground, but an association requiring a large area of land, the peasants may be less at a disadvantage in the bargaining which determines letting agreements and especially the amount of the rent.

§ 4. THE ACTION OF THE STATE.

Having pointed out the most characteristic features observed in the recent agrarian agitation, indicated the most striking tendencies in the transformation of agricultural agreements, and considered the consequences as regards production, the author of the report goes on to enquire in what way the State might intervene in the work of reforming existing agreements.

With respect to distribution, he maintains that any State intervention to limit the complete liberty of contract would be useless. "It is a mistake to attribute to the agricultural agreement a determining power in conflicts between classes because it is an effect rather than a cause. Both good and bad relations among those who collaborate in agricultural production are found under the same type of agricultural agreement: just as agreements of totally different types determine relations equally good or equally bad. The essential is that the contracting parties should be in a position of equality towards each other." (1) This is fully confirmed by the facts considered in the enquiry. The writer of the report observes that when the peasant, discarding the old traditional obsequiousness to the master, and acting in the spirit of the modern working man, places himself on an equal footing with his employer, with a keen sense of his own rights, and a conviction of having power to improve his condition, no agreement will prevent him from working and agitating towards this end. And no agreement can in itself assure to the peasant a satisfactory economic condition, because such a condition, even under the same agreement, varies according to the technical organization to which it is applicable and according to the contracting parties.

(1) VAIENTI (Ghino): Studi di politica agraria Rome, "Athenaeum," 1911.

In this matter the State can do nothing except "to favour peaceful solutions of class conflicts, and to ensure that such solutions shall be respected."

Still on the subject of distribution, and especially with regard to the letting of houses, there is a demand in many places for a legislative regulation of rents. Fair rents are demanded. But the writer of the report maintains that the objects sought by means of a legislative regulation of rents would be better attained by substituting the collective for the individual contract, as shown by many striking examples. This would not prevent an appeal to arbitration on a point of equity connected with rents in individual cases, or for the comparison of a certain period of time with another.

While affirming that freedom of contract is the best guarantee of equal distribution, the writer does not deny that such freedom might well be limited so far as to prohibit any custom which might interfere with production, or to make compulsory such as might be advantageous to it, because even should certain customs be either forbidden or made compulsory there would remain in every agreement many others open to arrangement between the parties in order to secure equitable distribution. But the writer goes on to say that regulations for produce-sharing and other tenancies, etc., in conformity with the conception put forward—that is, leaving undetermined certain clauses by which the distribution of the net produce would be definitely fixed, but determining others which tend to ensure an increased production—can only be satisfactorily drawn up locally, because the technical methods vary from district to district. What is needed is a model set of regulations compiled locally and subjected to periodical revision.

For the produce-sharing tenant this might among other things fix the date of the expiration of the agreement, the notice required to terminate it, the mode of transfer of the land from the outgoing to the incoming tenant, the method of fixing the amount of compensation due from the one to the other or the estimated value of stock and of inexhausted improvements. For letting agreements it would be possible to determine district by district the customs most favourable to production, especially with regard to the form and manner of payment of rent, caution money and dues, restrictions on freedom of cultivation with special regard to the last years of the lease, to consigning, reconsigning, balance-sheet, etc.

The writer thinks that the task of the State should be to promote and facilitate everywhere the compilation of such model regulations, a work which requires special competence and full knowledge of local agricultural methods.

With regard to legal efficacy it might be established that the rules contained in them should be binding in the absence of any agreement to the contrary.

Again considering the question of production the writer of the report inquires whether there is any limitation to freedom of contract which might be introduced into the legislation on agricultural agreements. With respect to this he insists on the idea that to maintain production at a high level it is necessary to excite the interest of agricultural labourers, reducing

paid labour to a minimum. It is also necessary to recognize the right of the tenant to compensation for improvements. The objections to this much discussed reform may be overcome if it be applied on fixed principles, which according to the writer, might be the following :

(1) Legal right of the tenant to compensation, within fixed financial limits, for improvements (buildings or land) of utility locally recognised, in the sense that they are to be considered necessary for the normal methods of cultivation applied in the district ;

(2) Assigning to local technical authorities the task of drawing up a list of the improvements for which compensation might be paid, and the corresponding financial limit, subject to periodical revision ;

(3) That the authoritative standard for determining the amount of compensation shall be the increase of the commercial value of the land due to improvements.

For a just and effective application of the reform it would also be necessary that the granting of credit for improvements should also be applied to facilitate the payment of compensation by the landowners, so that they may find the means of paying in the increase of rent due to improvements; and that the agricultural experiment stations should be instructed to determine by experiment the methods of maintaining a rational balance between fertility and cultivation.

To secure the efficacy of State intervention in the matter of agricultural agreements the writer believes that local organizations are needful, and also a suitable central body to stimulate their activity and co-ordinate their work. For the compilation and periodical revision of the proposed regulations, for drawing up lists of improvements for which compensation may be made and for fixing the financial limits of compulsory compensation local provision must be made.

It must be observed, besides, as an indication resulting from the inquiries made, that there is a strong feeling of the necessity for research into agricultural economic questions, which in the conflict between classes might offer a basis of positive knowledge to the contending parties. Such researches will prove indispensable for those judges of equity appointed by recent legislative provisions for cases of collective conflicts.

The local organization to which such a task would be assigned ought, according to the writer, to be composed usually of a technical staff with the assistance of representatives of both sides. Until there is a modification of the present arrangements of the administration of agriculture this local organisation might be constituted by the Provincial Agricultural Commissions or by the Special Committee appointed by them, with one representative of the farmers, one of the labourers (or tenants in the case of the compilation of regulations respecting large properties) and three technical experts of acknowledged competence ; the president should be the magistrate who presides over the Special Committee. The three experts might act together in the case of collective disputes.

The deliberations of the proposed local technical organisations should be guided by means of adequate instructions, and reviewed before coming

into force, by a central technical organisation specialized on the subject of rural economy in general and of agricultural agreements in particular ; an organization which, while keeping in strict co-ordination and collaboration with the professorships of rural economy of the State institutions, and with the proposed local organisations, should at the same time promote and direct the researches in rural economy to which we have referred. It should be noted that the nucleus of such an organization is already in existence in the Bureau of Agricultural Statistics. This institution, provided with the necessary specialized technical staff, extended so that it may study questions of rural economy, is quite able, besides its regular statistical duties, to perform other specified tasks. It ought to have a regular connection with the Labour Bureau. But above all things it ought to be completely independent of all political currents and influences. The present tendency to entrust State functions to autonomous bodies ought to be applied in this case.

With regard to one of the clearest indications suggested by the information collected — the more frequent letting of land to labourers — attention should be called to the great importance assumed by the question of good technical instruction for the peasantry, at present almost entirely wanting. It is affirmed that the State ought to supply the deficiency with the greatest possible energy and promptitude, in a form adapted to the requirements of the peasants. And the writer observes that since the more difficult technical problems are those that involve changes from one form of cultivation to another attention should be specially called to the assistance which may be given by the State either by contributing to the cost of such change or by a form of credit adapted to the circumstances. To make such assistance efficacious it should come through local organizations, as the problems to be solved are local and very different from one another.

In short, such is the line of action which according to the writer, the State should endeavour to follow respecting the reform of agricultural agreements. He also warns us that we must not forget that often the solution of agrarian problems depending on the reform of agreements can only be sought for in reforms of technical methods of cultivation, that the introduction of certain relations between the contracting parties which may be considered desirable presupposes certain reforms in agricultural methods, and that finally a good general agrarian policy on the part of the State would be more efficacious than direct intervention in the matter of agricultural agreements to solve many difficulties.

THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Eighteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS.

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5 $\frac{1}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt,	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	983/64 d.	at par
1 Leu (100 statinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4 d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25.261/64 d.	at par
1 Milreis, gold (Portugal)	=	45.519/64 d.	at par
1 Pesetas, gold (100 centimos) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	185.025/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8 d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	45.111/32 d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.057/64 d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

THE FIFTH GENERAL ASSEMBLY
OF THE INTERNATIONAL INSTITUTE OF AGRICULTURE

The Fifth General Assembly of the International Institute of Agriculture was held at Rome from 3 to 8 November 1920.

Amongst the decisions taken and the resolutions passed some referred to the finances of the Institute and to the reorganization of the staff. With regard to these we confine ourselves to noting the following resolution, relating to the formation of Consultative Committees for the various services of the Institute:

"The General Assembly is of opinion that the Permanent Committee should examine the desirability of forming, with the help of the Governments, a Consultative Committee for each of the three branches of the Institute (General Statistics, Agricultural Intelligence and Plant Diseases, Economic and Social Intelligence) in order that the work of each of these branches may permanently benefit by the advice of experts and technicians. The General Assembly considers that these Consultative Committees should be composed of a small number of competent persons who would usually give their advice by correspondence, but who should also meet once a year at Rome to discuss the work of the Institute, in concert with the Permanent Committee and the Chiefs of the various Bureaux."

As to the relations between the International Institute of Agriculture and the League of Nations, the General Assembly passed three resolutions, which we reproduce in full:

"I. The General Assembly expresses its profound satisfaction at the fact that, in the treaties of peace recently concluded, a measure has been inserted for developing co-operation between the Nations and for maintaining international peace and security by means of the establishment of a League of Nations: it sincerely hopes that these lofty designs may be crowned with success, so that humanity may be spared the deplorable sufferings and calamities of a future war.

" 2. The Assembly approves the attitude taken up by the Permanent Committee in regard to the relations to be established between the League and the Institute and expresses the desire that the most friendly and cordial relations should be established between the two institutions.

" 3. The General Assembly invites the Permanent Committee to communicate to the adhering States, as soon as it has received it, any communication which may be made to it by the League of Nations in conformity with Article 24 of the Treaty of Versailles; and to accompany this communication by any recommendation serving to maintain the work created by the Convention of 1905."

On the other hand, in regard to the relations between the Institute and the agricultural organizations and associations, the General Assembly decided:

" That the International Institute of Agriculture may put itself in relation, whenever it may deem it useful to do so, and after having the approval of the Governments concerned, with the agricultural organizations and associations of the different countries, in order to be more fully informed regarding all questions relating to the protection of the interests common to all the agricultural classes and to the betterment of their condition."

Finally, the General Assembly, " in view of the facts that the International Institute of Agriculture represents a source, unique in the world, of documentation on all the questions of interest to agriculture; that its services are called upon to study all the statistical, technical, economic and social problems upon the solution of which depend the progress of agriculture and the betterment of the conditions of the rural population; that the Institute thus forms an invaluable centre of study and of international collaboration through the representation of 60 adhering States," decided:

" To invite the Governments to send to the Institute technicians and students who will come to complete at Rome their general education, from the agricultural point of view, by the study of the organization and the working of the various services of the Institute as well as the problems which are therein examined.

" To found, for this purpose, scholarships to be held at the seat of the Institute or travelling scholarships for technicians, officials or young men worthy of this form of encouragement or reward, these young men to be placed under the supervision of their respective delegates at the Institute. Such young men could also benefit by the advantages which the Italian Government would bestow upon them by placing at their disposal all means of instruction and research such as laboratories, libraries or experiment stations."

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* *

Each of the three great technical services of the Institute — General Statistics, Agricultural Intelligence and Plant Diseases, Economic and Social Intelligence — was the subject of important resolutions.

As to the Service of Statistics, the Assembly first of all dwelt upon its utility and extended its sources of information and its field of action :

" 1. Seeing that the Service of Statistics of the International Institute of Agriculture is called upon considerably to increase its activity, in regard both to the extent of its investigations and to the rapidity in issuing information, the General Assembly expresses the desire that the adhering Governments should make every possible effort to facilitate the Institute in the accomplishment of its mission in the matter of statistics and that the Permanent Committee, for its part, should make such arrangements in its Budgets as may be required for the development of this service.

" In particular, the Governments of the adhering States are earnestly requested to establish a system of constant correspondence with the Institute in order to communicate to it without delay the statistical information of which it has need ; such correspondence to be carried on telegraphically in the case of all communications which are of an urgent nature for the Institute.

" 2. The Institute is authorized to utilize, with due reserve, information from private or semi-official sources in cases where official information is not forthcoming, but only after the Governments concerned have given their authorization and have furnished indications.

" 3. The General Assembly considers that it is desirable to add tea (black tea and green tea) to the list of products of which the *International Crop Report and Agricultural Statistics* and the *Annuaire de Statistique Agricole* publish data relating to the area cultivated, production and commerce."

Examining next the statistics of vegetable production, the Assembly passed three special resolutions :

" 1. The General Assembly insists on the absolute necessity for the adhering States, as well as for the Statistics Service of the Institute, to keep always in view the primary importance of rapidity in the transmission and publication of data likely to exercise an influence upon prices.

" To this end, the Assembly earnestly requests the adhering Governments to forward to the Institute the data relating to area, condition of crops and production immediately they are known by the offices concerned and, in any case, on the 10th of the month at latest.

" On the other hand, the General Assembly invites the Institute to publish, at the nearest possible date to the 10th, an extract of the essential data regarding the area, condition of crops and production which will afterwards appear with other data in the *International Crop Report and Agricultural Statistics*.

" 2. The General Assembly, while noting the improvements which a certain number of adhering States has introduced, or proposes to introduce, into their services of agricultural statistics, has come to the conclusion that, in order to put the Institute in a position to provide a rapid, complete and effective international service of information, all the adhering States must be asked to make further efforts.

" The General Assembly invites the Permanent Committee to study

for each product, the improvements which each of the States ought to introduce into its system of statistics in order to put the service of international information on a sound basis. These studies should be communicated to each Government, with the request that it should take the steps required to satisfy the needs of the services of the Institute.

"3. The General Assembly earnestly requests the adhering Governments to be good enough to state —

"(1) What is the method adopted by the persons whose duty it is to supply information regarding the state of the crops.

"(2) To specify whether they confine themselves to giving an estimate of the apparent state of growing crops at the moment of the inquiry (for example, in the form of such indications as: very good, good, fair, etc.) or if they express their opinion according to the probable importance of the future crop, giving for example indications of the probable average production per hectare:

"(3) To explain the reasons which have determined the adoption of the method in use and, if it is unable to adopt in the future the method laid down by the Institute, to state the reasons which prevent it from doing so."

The statistics of live stock were the subject of resolutions not less important:

"1. The General Assembly is of opinion that it is absolutely necessary, in the national as well as the international interest, that each State should possess statistics of live stock. It hopes that the countries in which such statistics do not yet exist or in which they are not organized in such a manner as to satisfy the requirements of an international service of information, will take, as rapidly as possible, the steps necessary for the establishment of these statistics, in conformity with the wishes expressed by the Institute.

"2. The General Assembly is of opinion that the statistics of live stock should show each year, as far as possible, the existing number of animals of each kind and of each of the classes mentioned in the proposal hereafter given. If the immediate preparation of such detailed statistics does not appear possible for certain States, the General Assembly is of opinion that the statistics of live stock should include for each of them, from the year 1925 onwards, a decennial census and more restricted annual statistics.

"3. The General Assembly proposes that the States should adopt for the annual statistics and, where it is made, for the periodical census, the period between the months of December and April, and that they should publish at any rate the provisional results within a period of three months from the date of the inquiry.

"4. The General Assembly expresses the desire that the adhering States should adopt a classification which, while corresponding in the best possible way to their conditions, should allow of the tabulation of their statistical data in the following classifications:

"(a) HORSES: (1) Colts and fillies under three years old; (2) stal-

lions three years old and upwards; (3) mares three years old and upwards; (4) geldings three years old and upwards.

"(b) CATTLE: (1) Calves under one year old; (2) bullocks, bulls and heifers between one year and two years old; (3) heifers and cows over two years old (including heifers and milch-cows); (4) bulls over two years old; (5) bullocks over two years old.

"(c) SHEEP: (1) Lambs under one year old; (2) rams of one year old and upwards; (3) ewes of one year old and upwards; (4) other sheep of one year old and upwards.

"(d) SWINE: (1) Young pigs under one year old; (2) boars of one year old and upwards; (3) breeding sows of one year old and upwards; (4) other pigs of one year old and upwards.

"(e) GOATS: All animals.

"5. The General Assembly instructs the Permanent Committee to present to it at its next meeting a detailed report on the state of the statistics of live stock in the different countries."

Two resolutions relate to commercial statistics:

"1. The General Assembly instructs the Permanent Committee to continue the monthly publication of information on imports, exports, visible stocks, and prices for the five cereals (wheat, rye, oats, barley and maize) and for cotton, as they are at present furnished to the Institute, and to introduce any modifications in regard to the publication of this information which may be considered necessary for the perfecting of the service.

"The Institute will approach the respective Governments with a view to obtaining their authorization to utilize for the service of information regarding visible stocks and prices, in default of official information, information from private sources, in conformity with Article 21 of the Regulations (1).

"2. The General Assembly renews once more its earnest request to the adhering States to calculate, if only by way of experiment, the invisible stocks (residues of the last crop retained by the producers) for each of the five cereals mentioned, once a year, at the moment when the new crop begins to be available. The Governments are earnestly requested to communicate the results of these calculations to the Institute, which will pledge itself not to make use of them for publication until it has obtained the authorization of the respective Governments to do so.

"The General Assembly again renews the expression of its desire that the Governments of the adhering States should take steps to perfect the service of information in regard to the visible stocks for the five cereals mentioned, as well as to inaugurate a monthly service in regard to this matter if they do not already possess one."

In reference to a kindred subject, the General Assembly requested the Permanent Committee "to continue the studies made with a view

(1) Article 21 lays it down that "the documents and information contemplated in articles 18 and 19 are furnished directly by the Governments or under their responsibility and by their intervention "

to establishing world balance-sheets of the principal agricultural products which form the subject of the documentary leaflets published under the title of Statistical Notes, the contents being strictly limited to the object of the publication, to pursue the study of the prices of the principal food-stuffs which contribute to the determination of the cost of living, and to present a report on this question to the next General Assembly."

Lastly, on the proposal of the Belgian and English Governments, the Assembly asked the Permanent Committee to draw up the programme of an inquiry into the encouragement given to agriculture, to carry on this inquiry and to make known the results to the next General Assembly.

* *

To the Service of Agricultural Intelligence and Plant Diseases many tasks were entrusted.

In the first place, with reference to the international organization of agricultural meteorology, the following resolutions were passed:

"1. The General Assembly requests the adhering States to communicate to the International Institute of Agriculture, as quickly as possible, the actual position, in each country, of the organization of agricultural meteorology from the (a) scientific, (b) legislative and (c) administrative points of view.

"2. It further requests the adhering States to forward to the Institute proposals and suggestions which seem calculated, by their application, to promote scientific and administrative progress.

"3. The General Assembly is of opinion that it is desirable to create a Permanent Commission of Agricultural Meteorology, the members of which shall be nominated by the Minister of Agriculture of each of the countries and chosen from amongst the meteorologists, agricultural experts, botanists, phytopathologists, agricultural geologists and malaria experts.

"4. The General Assembly is of opinion that the Permanent Commission of Agricultural Meteorology should meet at Rome, on the occasion of each General Assembly, in order to propose to it, after consultation with the Permanent Committee, suitable measures for promoting the progress of agricultural meteorology.

"5. The General Assembly draws the attention of the Governments to the work done and the results obtained by the International Congress of Meteorology, held at Venice, which in its section of agricultural meteorology dealt with the new direction to be given to the services of agricultural meteorology."

Phytopathology was the subject of three different resolutions.

The first, based on the International Convention of Phytopathology of 4 March 1914, requests that the Governments should ratify it as soon as possible or should adhere to it and agree to organize in their respective countries the necessary phytopathological services.

The second asks "that an inquiry should be opened in regard to the

Olive Fly (*Dacus oleae*) in order to prepare a complete documentation of the various methods employed for combating it, particularly by the help of parasites, with a view to submitting it to the Governments concerned."

The third resolution calls for the preparation of "a precise documentation in order to fix the ways and means necessary with a view to creating an International Institute of Phytopathological Research, which should also be a centre for the collection of all documents and materials relating to the enemies of plants (collections of plants, of insects, etc)."

An International Conference for the Organization of the Campaign against Locusts having been held at the Institute immediately before the meeting of the General Assembly, the latter passed a resolution calling upon the Governments which were represented at this Conference to ratify the Convention of 31 October 1920 in which it resulted, or to adhere to it as soon as possible. It also pointed out to the States and Colonies which will adhere to this Convention "the desirability of creating in each of these States or Colonies, if such an organization does not already exist, a government Entomological Office or Station attached to the agricultural services and having for object to ensure the carrying out of the following measures:

"The Entomological Office shall have as its object (besides other Government work entrusted to it): 1. To study the biology of these insects and their parasites; 2. to direct and organize the campaign against them; 3. to collect all the scientific, statistical, legislative, administrative and practical information relating to the campaign against these insects in its country; 4. to facilitate the exchange or the collection of the parasites which the State may desire to try to acclimatize."

Amongst the work already carried out by the Bureau of Agricultural Intelligence and Plant Diseases is an inquiry into the organization and working of agricultural book-keeping in various countries. The General Assembly noted "with the greatest satisfaction the fact that the importance of Agricultural Book-keeping Offices is almost universally recognized, since the number of countries which possess such offices is steadily increasing," and passed the resolution:

"That Agricultural Book-keeping Offices should be organized in each country, as it has previously expressed the desire that they should be, that the number of these institutions should be increased in the countries where they already exist and that, in addition, a Central Office of Agricultural Book-keeping should be created in each country.

"It urges the determination of fundamental ideas and of harmonized methods in accordance with a single plan in which should be traced the guiding principles for the statistical elaboration of the data supplied by the Offices, having in view the solution of the various technical and economic problems relating to agriculture.

"It expresses the opinion that the International Institute of Agriculture ought to undertake to centralize all the studies made by the Agricultural Book-keeping Offices and to utilize at the opportune moment for its statistical and economic publications the results obtained by them."

The General Assembly asked that an inquiry should also be opened by the International Institute of Agriculture into the measures of every kind taken by the various countries during the War and after the cessation of hostilities to increase and intensify agricultural production.

This inquiry will bear on the following points:

" (1) Steps taken by the State to regulate the selling price of agricultural produce in such manner that the prices obtained by the farmers should be remunerative and suffice to induce them to produce the maximum quantity of food-stuffs and at the same time to restrict speculation and to prevent the inflation of prices in the event of a shortage.

" (2) Indications of all premiums or guarantees concerning the price of agricultural produce offered to the farmers in order to encourage the production of food-stuffs.

" (3) Steps taken by the State to control and regulate the use and cultivation of land, including the supervision of methods of cultivation, the removal of bad farmers and the cultivation of the land by the State, as well as the prohibition of the cultivation of crops not necessary for the food supply and the utilization of land which would have been used for such crops in the production of food-stuffs.

" (4) Restrictions on the slaughtering of live stock with a view to preventing the premature slaughtering of breeding animals and steps taken to maintain a sufficient number of milch-cows to supply the minimum quantity of milk necessary for the country as well as the measures adopted to increase the national production of dairy produce.

" (5) Steps taken to obtain the use of land, especially in urban areas, in the form of allotments on which industrial workers could cultivate produce for their own domestic consumption.

" (6) Encouragement given to the breeding of poultry, rabbits, goats, bees and other small live stock with a view to obtaining food for consumption.

" (7) Supply and distribution of chemical fertilizers, including the importation of raw material, improvements in the methods of manufacture, regulation of the composition of the manures and the fixing, in the interest of the farmers, of their selling price.

" (8) Steps taken to facilitate the supply of seeds necessary for the cultivation of food crops; production, introduction and distribution of good kinds of seed or of selected seed; regulation of the sale of seed, especially with a view to guaranteeing a suitable standard of purity and germination.

" (9) Steps taken to facilitate the supply of implements and machinery, and especially machines which serve to make good the deficiency of labour and working animals resulting from the war and, if desirable, their use in common.

" (10) Importation of oil-seeds and other products needed for the manufacture of feeding-stuffs, the control of the manufacture and the fixing of the selling prices and qualities.

" (11) Steps taken with a view to facilitating the substitution of

agricultural labourers called to the colours (women, soldiers, foreign labourers).

" (12) Steps taken to facilitate the collection and industrial transformation of waste with a view to its utilization as human food or food for stock, the manufacture of fertilizers, etc.

" (13) Steps taken to facilitate the transport of agricultural produce and of fertilizers and manures or other agricultural requisites.

" (14) Steps taken to facilitate propaganda in order to stimulate the farmers to improve their production of food-stuffs and to instruct them how to overcome the difficulties created by the War.

" (15) Steps taken to facilitate direct relations between the farmers of different countries with a view to ensuring the exchange of selected products and of choice breeding stock.

" (16) Steps taken to facilitate agricultural co-operation and credit during the War.

" (17) Communication of statistical or other information illustrating the effect of all these measures."

* *

In regard to economic and social questions, the General Assembly decided that the publications necessary for bringing up to date and making known to the public the documentation collected by the Bureau of Economic and Social Intelligence are the following: (a) *The International Review of Agricultural Economics*; (b) monographs; (c) an International Year Book of Economic and Social Intelligence; (d) a Vocabulary of the terms used in economic and social questions.

In regard to the two last publications, their issue will depend upon the state of the Institute's finances. But if the publication of the Year Book could not immediately be undertaken the Assembly considered that it would be very desirable that the Bureau of Economic and Social Intelligence should forthwith undertake to collect the necessary materials for this Year Book in order that it might be published without delay, as soon the state of the finances would permit.

The General Assembly further expressed the desire "that in order to contribute effectively to the agricultural reconstruction of which the world has need after the war, the Permanent Committee should take all such steps as it may deem necessary in order that the International Institute of Agriculture may be able to study, more fully than circumstances have hitherto permitted, the economic, juridical and social conditions of the life of the agricultural classes, including all matters which concern on the one hand material conditions and well-being, and on the other hand the intellectual and moral education of the rural family of the future."

Finally, the question of the regulation of agricultural labour having been the subject of an important discussion, the General Assembly decided that the text of the speeches made on this subject during the sitting on the morning of 8 November should be communicated to the Governments of the adhering countries and to the International Labour Office.

Part I: Co-operation and Association

ITALY.

SOME FACTS REGARDING THE CO-OPERATIVE MOVEMENT.

SOURCES:

IL MOVIMENTO COOPERATIVO IN ITALIA Ufficio Statistica della Lega Nazionale delle Cooperative Milano, 1920.

ALMANACCO DEI COOPERATORI E DEI PREVIDENTI Lega Nazionale delle Cooperative Milan, 1920.

The War which in its first period had disturbed the co-operative movement in Italy and almost brought it to a standstill, afterwards notably contributed, in consequence of the policy followed by the State in regard to food supply and the distribution of food-stuffs and in regard to public works, to the development of distributive co-operative societies, of societies for production and labour and of agricultural co-operative societies. On the cessation of hostilities the urgent need to provide for the resumption of the economic life of the country roused everywhere great activity in the promotion of new and fruitful undertakings; this could not fail to affect co-operation, which, having already demonstrated its importance in Northern and Central Italy, was also spreading in Southern Italy. It may be said, in fact, that there is now no province in which the co-operative principle has not taken root.

The Statistical Office of the National League of Co-operative Societies thought it opportune and useful, at the moment when the two fundamental problems of credit in favour of co-operative societies and the reform of the legislation governing such societies were under discussion, to collect data and precise information on the most striking forms of co-operation in Italy, on the "most active forces of the movement," as well as on those organizations which constitute the framework of co-operation. These data we here resume in order that the reader may be informed of the progress attained in this branch of national activity.

§ I. STATISTICS OF ITALIAN CO-OPERATION.

Official statistics of the Italian co-operative societies were compiled in 1911 by the Ministry of Agriculture, Industry and Commerce, to ascertain the situation on 31 December 1910. According to these statistics,

there were in Italy on that date 5,065 co-operative societies, including 1,764 distributive societies, 926 agricultural societies, 87 societies for the production on food-stuffs, 31 fishermen's societies, 564 miscellaneous productive societies, 379 building societies, 1,017 labour societies and 297 mixed societies. They contained in all 1,165,702 members; their capital amounted to 151,852,579 liras, and their reserves to 19,880,166 liras. These statistics, the only ones which exist regarding the various societies, besides being now very much out of date, were certainly incomplete, (1) because they only took account of legally constituted co-operative societies, whereas it is well known that not a few societies exist in fact without having been legally constituted, and if, generally speaking, these are amongst the smaller societies, it must not be forgotten that they include the great Co-operative Alliance of Torino, which, though the third largest distributive society in Italy, does not figure in the statistics; (2) because the data relating to the individual societies (number of members, amount of capital, turn-over) referred to only 4,233 societies out of the 5,065 enumerated.

Subsequently, a similar inquiry was undertaken in 1915 by the National League of Co-operative Societies, which is the central organization of the co-operative societies. These statistics, which we examined in our issue of June 1917, determined one important figure, that is the number of co-operative societies in existence in 1915, without distinguishing between those legally constituted and those not so constituted, or between those affiliated to the League or not so affiliated to it. The number was ascertained to be 7,429 (including 3,022 societies of production and labour, 2,408 distributive societies, 1,142 agricultural societies, 752 building societies and 105 insurance societies); the total number of members 956,085, the total capital, including accumulated reserves 118,817,841.90 liras and the total business done (incomings and outgoings) 648,248,972.82 liras per annum. The business done was thus divided: agricultural co-operative societies, 211,514,782.82 liras; co-operative societies of production and labour, 163,732,001.14 liras; distributive co-operative societies, 156,841,214.87 liras; building societies, 116,160,973.90 liras. However, apart from the number of existing co-operative societies, the other data are in large part approximations, as it was not possible to obtain from all the societies the necessary information regarding their separate activity and importance. Moreover even these statistics are now out of date, as they do not take account of the great development of co-operation during and after the war.

Though it would be extremely difficult at the present moment, when the national economy is settling down again, to undertake the compilation of accurate and complete statistics of the Italian co-operative movement, it may be safely affirmed that not less than 10,000 co-operative societies are at work in Italy, amongst which the most numerous are the societies for production and labour, the agricultural societies and the distributive societies.

§ 2. THE ORGANIZING AND CO-ORDINATING BODIES
OF THE ITALIAN CO-OPERATIVE MOVEMENT.

The organizing and co-ordinating bodies of the co-operative movement, formed by the National Co-operative Congresses, are the National League of Co-operative Societies, the Central Federations — for the co-operative distributive societies, the co-operative societies for production and labour, and the agricultural co-operative societies — the local federations and the consortia (1).

These bodies provide for the direction of the movement, for assistance and advice in regard to technical matters, book-keeping and legal questions, for summoning congresses to discuss and deal with questions of general interest, for making representations to the public authorities on behalf of co-operation. Thus even the small co-operative societies represent the elements which go to make up a vast organization by which their work is guided and co-ordinated, common services are furnished, and their material and moral strength is increased.

As has been indicated, the central organization is the National League of Co-operative Societies, which has its headquarters in Milan and a branch in Rome. It was founded in 1886 and has as object to contribute to the movement for the organization and material and moral betterment of the working classes.

With this object it proposes :

(a) To diffuse co-operative principles and institutions, as being a noble and practical expression of the sentiments of brotherhood and of the solidarity of the human race ;

(b) To further the progress of co-operative societies, by the perfecting of the rules and the adoption of suitable and correct technical and administrative methods ;

(c) To watch, with singleness of aim and united strength, over the economic and moral interests of the affiliated co-operative societies, intervening to defend rights which may in any manner be ignored by the public authorities ;

(d) To promote and maintain reciprocal business relations between the affiliated co-operative societies, receiving and communicating offers of goods or of staff, through the medium of the regular and gratuitous publication of a column of wants and offers in the periodical *La Cooperazione Italiana* ;

(e) To advocate the adoption of legislation which would better respond to the special needs of distributive co-operative societies, labour

(1) The co-operative movement of which we are here speaking and of which the National League of Co-operative Societies is the central body, is socialistic in character. The co-operative movement organized by the Catholics, of which the Italian Co-operative Confederation and various national federations are the central bodies, is also assuming considerable importance in Italy, especially in the matter of co-operative credit.

societies and credit societies and to watch over the precise interpretation of the laws in force ; to assist the various classes of co-operative society in the development of their work, establishing for the purpose suitable offices or special sections ;

(f) To keep alive the spirit of association and of thrift by means of special publications and lectures and by all the moral and material means of which the League may dispose ;

(g) To carry out whatever other work may be suggested by experience or by particular circumstances as being useful for the co-operative movement.

The means at the disposal of the League for carrying out the objects above mentioned are formed by the contributions of the federated societies, who pay between 30 and 100 liras per annum according to their size and amount in all to about 200,000 liras a year. Attached to the League are the central federations of each class of co-operative society, viz ;

The National Federation of Co-operative Societies for Production and Labour, with headquarters in Rome ;

The National Federation of Agricultural Co-operative Societies, with headquarters at Bologna ;

The Italian Consortium of the Distributive Co-operative Societies, with headquarters in Milan.

Besides the central federation, there are provincial and regional federations of the various classes of co-operative societies. The provincial federations have not yet all been formed, but several have already been regularly at work for some time past.

This system of organization, which was decided upon by the Congress held in Milan in July 1918, culminates in the National League of Co-operative Societies, which on 1 September 1920 numbered 3,693 federated societies, as compared with 203 when it was first formed. The progress has certainly been remarkable, the more so if one considers that besides this number of societies directly affiliated there must be added another thousand societies belonging to local federations affiliated to the League, but not themselves directly affiliated.

Amongst the societies which are not affiliated are the Catholic co-operative societies which have formed themselves into organizations strictly confessional in character. In regard to these it was not possible for the League to obtain precise and complete data.

However the group of 3,693 societies affiliated to the League form a compact organization which, apart from the separate Catholic movement and from the societies which remain isolated, may well be said to represent a conspicuous part of Italian co-operation.

§ 3. THE CO-OPERATIVE SOCIETIES FOR PRODUCTION AND LABOUR.

Amongst the forms of co-operative society to be found in Italy, one of the most characteristic is undoubtedly the co-operative society for production and labour. Formed by workmen, and especially by manual

labourers and those belonging to the building trades, these societies first arose with the specific object of making the workers independent of the ordinary contractors and of enabling them directly to take up contracts for public works (construction and maintenance of roads, bridges and canals, execution of drainage, land improvement and irrigation works, systematizing land and effecting changes in the methods of utilizing it, etc.) Favoured by special laws regarding public contracts, they rapidly multiplied and grew stronger. From small societies, composed of a hundred carters and navvies, formed to undertake directly the construction of a short embankment, they gradually became huge co-operative societies of labourers, such as that of Ravenna, which is typical of the class of society; it does not limit its sphere of action to its own province but goes here and there with its numerous squads of members and undertakes important drainage works and improvement works whereby large tracts of land are rendered productive.

The maximum contract for public works which can be given to such societies is 1,000,000 liras (1). But legally constituted societies can form themselves into consortia, under the terms of the Law of 25 June 1909, No. 42, to compete for larger contracts. In regard to this matter, the Decree of 6 February 1919, No. 107, is important: it reforms the system of public contracts by giving it greater elasticity and making it better adapted to the exigencies of a time in which the policy of public works represents one of the principal bases of the national economic revival. It laid down that the maximum value of the works to be entrusted to consortia of co-operative societies should be 5 million liras, and this amount may even be exceeded when, on the advice of the Higher Council of Public Works, the Government holds that the consortia offer sufficient technical and financial guarantees. Nor must we omit to mention the Law of 26 September 1920, No. 1495, which to facilitate the co-operative societies for production and labour and their consortia in obtaining the necessary credit for executing works and furnishing supplies for the State, the provinces, the communes or other public bodies, authorized the banks of emission to re-discount for the National Institute of Credit for Co-operation, which acts as the central bank of the co-operative societies (2), bills up to the total amount of 100 million liras, at a rate equal to the ordinary rate of discount.

Thus, the extension of the maximum value of the contract, on the one hand, and the facilities for obtaining credit, on the other hand, will enable these co-operative societies, by themselves or grouped in consortia, notably to increase their activity, in accordance with the wishes expressed by the most recent co-operative congress.

We reproduce in Table I statistics of the principal consortia of the co-operative labour societies formed in Italy in the terms of the Law of

(1) Law of 26 September 1920, No. 1313, which authorized the expenditure of 300,000,000 liras for the carrying out of public works.

(2) With regard to the work of the National Institute of Credit for Co-operation in 1919, see our issue of October 1920, page 686.

TABLE 1. — THE CO-OPERATIVE MOVEMENT IN ITALY, 1912-1913

Name	Head- quarters	Date of founda- tion	No. admitted co-operative societies	Capital sub- scribed	Re- serves	Members of the co-operative societies	Works carried out (in liras)								Works being carried out	
							1912	1913	1914	1915	1916	1917	1918	1919		
Cons. Coop. Regionale Venezo. Feder. delle Coop. del- la Provincia Cons. Coop. Edilizio . Cons. Cadolino Coop. Cons. Edile fra Coop. di Prod. e Lavoro . Consorzio Prov. Coop. braccianti Cons. Cooper. Lav. Ap- pennino Parmense . Feder. Ligure Coop. di Lavoro Cons. Coop. braccianti Cons. Carnico Coop. di Lavoro Cons. Coop. muratori, braccianti, carrett. . Cons. Sacconi fra Coop. di prod. e lavoro. . Cons. Grafico fra Coop. di prod. e lavoro . Cons. Coop. braccianti, carrettieri, muratori Cons. Autonomo Coop. Cons. Coop. Veronesi Il Risorgimento . . Cons. Romano Edile fra Coop. di Costruz. Cons. Coop. di Prodn- zione e Lavoro . . . Cons. Gen. fra Coop. di Prod. e Lavoro . Cons. Arti Libere fra Cooperative edili . .	Legnago	18-9-11	50	16,950	20,612	12,337	—	900,000	700,000	792,423	1,471,918	2,274,814	1,902,244	—	2,500,000	
	Ravenna	20-10-11	69	—	—	13,413	—	—	—	—	—	—	—	—	—	12,580,574
	Brescia	20-10-11	12	10,200	6,548	352	—	—	—	—	—	—	—	—	—	3,000,000
	Auronzo	27-10-11	3	60,000	—	200	30,430	124,136	250,433	10,000	600,000	—	—	—	—	After 1915, on account of the war, it did not car- ry out any works
	Rome	31-12-11	5	19,500	9,959	—	291,379	1,027,649	1,122,230	1,250,042	1,409,384	548,451	480,184	—	—	700,000
	Bologna	14-1-12	20	3,600	4,907	1,000	453,407	637,188	826,378	1,707,043	1,038,615	1,486,161	2,188,389	—	—	2,400,000
	Langhirano	14-1-12	6	5,400	147	—	—	—	—	600,000	—	—	—	—	—	—
	Genoa	12-2-12	20	202,987	161,929	865	2,063,379	2,300,964	2,438,954	1,866,190	1,566,346	912,739	1,092,724	—	—	15,000,000
	Venice	18-2-12	19	7,130	2,168	7,000	—	30,000	800,000	225,000	—	—	—	998,000	—	1,684,000
	Tolmezzo	6-6-12	11	21,500	—	792	—	—	—	—	—	—	510,000	537,000	—	9,901,000
	S. Arcangelo (Romagna)	20-10-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Rome	8-12-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Rome	8-12-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Rimini	22-12-12	3	3,636	1,582	230	—	120,927	304,924	284,845	120,210	—	25,000	—	—	140,000
	Ravenna	16-2-13	42	115,400	26,085	6,800	—	47,997	420,798	432,034	472,790	733,326	1,904,560	—	—	1,826,340
	Verona	23-2-13	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Rome	23-2-13	30	30,000	—	211	—	—	—	—	—	—	—	—	—	7,500,000
	Ferrara	20-4-13	18	84,000	4,259	2,000	—	1,021,733	1,091,933	516,971	313,369	419,534	1,040,203	3,822,540	—	3,500,000
	Bologna	22-6-13	54	47,315	20,614	10,191	—	—	—	—	—	—	—	—	—	—
	Rome	29-6-13	5	7,000	—	51	403,000	275,000	—	—	15,000	—	20,000	—	—	225,000

TABLE I (cont.). — The Principal Consortia of Co-operative Labour Societies formed under the Law of 25 June 1909.

Name	Head- quarters	Date of founda- tion	No. of affiliated co-operative societies	Capital sub- scribed	Reserves	Members of the co-operative societies	Works carried out (in <i>liras</i>)						Works being carried out		
							1912	1913	1914	1915	1916	1917		1918	1919
Cons. Rosombrone fra Cooperative edilizie.	Fojano Chiara	15-7-13	4	6,934	—	400	—	—	—	—	722,171	201,387	—	—	—
Cons. Coop. produzio- ne e lavoro	Piacenza	11-12-13	6	5,000	—	—	—	—	—	—	—	—	—	—	—
Cons. Coop. Parmense di produz. e lavoro .	Borgo S. Donnino	21-12-13	5	32,057	—	—	—	—	589,738	—	—	—	—	—	—
Cons. Rile A. Maff.	Ancona	11-1-14	6	22,000	—	771	—	—	—	—	—	401,721	450,773	—	2,040,000
Cons. Coop. produzio- ne e lavoro	Imola	5-2-14	—	—	—	—	—	—	—	—	—	—	—	—	—
Cons. Coop. Lavoro della Vallata del Savio	Cesena	23-4-14	6	3,000	3,445	—	—	66,801	403,154	258,761	139,669	139,080	—	—	—
Cons. Coop. Lavoratori Selci	Rome	5-4-14	—	—	—	—	—	—	—	—	—	—	—	—	—
Cons. Coop. produ- zione e lavoro, mur- atori, braccianti, fer- rozzi	Pisa	4-3-15	18	12,230	—	1,000	—	—	—	—	145,000	—	—	—	1,400,000
Cons. Coop. produzione e lavoro	Fiuale Emilia	28-3-15	13	2,500	—	—	—	—	—	—	—	—	—	—	—
Cons. Coop. produzione e lavoro	Modena	17-6-15	—	—	—	—	—	—	—	—	—	—	—	—	—
Cons. Coop. produzione e lavoro	Parma	21-10-15	5	—	—	—	—	—	—	—	—	—	—	—	—
Cons. Nuova Massima fra Coop. edilizie . .	Massina	16-12-15	8	7,826	1,372	300	—	—	—	—	—	—	500,000	—	500,000
Cons. Coop. produzione e lavoro	Florence	22-1-17	16	165,855	4,924	340	—	—	—	—	—	—	4,950,000	—	1,850,000
Cons. Interprov. Coop. prod. e lav. Pesaro, Rimini, Forlì . . .	Pesaro	6-1-18	20	13,800	—	983	—	—	—	—	—	—	—	311,538	448,556
Cons. Coop. produzio- ne e lavoro	Naples	8-2-18	6	16,000	—	—	—	—	—	—	—	—	—	—	—
Cons. Veniviano metal- lurgici	Naples	8-12-18	—	—	—	—	—	—	—	—	—	—	—	—	—
Cons. V. Aglio fra Coop. prod. e lavoro . . .	Mantua	23-3-19	5	2,100	—	739	—	—	—	—	—	—	—	—	Began work on 15-10-19
Cons. Reggiano Coop. produzione e lavoro .	Reggio Emilia	6-7-19	5	4,950	—	1,000	—	—	—	—	—	—	—	—	500,000
Cons. Operaio metal- lurgico	Genoa	28-9-19	8	520,000	—	—	—	—	—	—	—	—	—	—	—

Works suspended on account of the war

25 June 1909, No. 422, and in Table II statistics of some federal bodies and institutions connected with labour co-operation not established in the form of consortia.

TABLE II. — *Federal Bodies and Institutions connected with Labour Co-operation not established in the form of Consortia in accordance with the Law of 25 June 1909.*

Name	Headquarters	Affiliated Societies	Members	Capital	Reserves	Works carried out in 1918	Notes
				liras	liras	liras	
Federazione milanese delle cooperative di produzione e lavoro.	Milan	30	3,000 ⁽¹⁾	1,033,000	— ⁽¹⁾	51,93,713 ⁽²⁾	⁽¹⁾ By the separate societies.
			⁽²⁾	145,717	⁽²⁾	3,789,658 ⁽²⁾	⁽²⁾ By the Federation.
Consorzio cooperativo di produzione e lavoro.	Reggio Emilia	31	5,735	515,840	10,263 ⁽¹⁾	645,507 ⁽¹⁾	⁽¹⁾ Work being carried out
Federazione cooperative di produzione e lavoro.	Pavia	—	1,100	—	—	1,152,000	
Federazione Veneta Cooperativa.	Venice	52	—	1,000,000	—	—	
Cooperativa edilizia della Regione Giulia	Trieste	—	650	65,200	—	2,000,000	
Vetreteria Cooperativa	Sesto Calende	—	107	474,000	—	3,045,000	
Federazione Italiana Cooperative di Lavoro	Rome	63	3,000	—	— ⁽¹⁾	14,000,000 ⁽¹⁾	⁽¹⁾ Work being carried out.

The central organization of the co-operative labour societies is the National Federation of Co-operative Societies for Production and Labour which we have already mentioned. Its headquarters are in Rome and it was legally constituted by a Decree of 15 August 1919, No. 1,525. Its objects are to unite under its leadership all the energies of Italian labour co-operation for the carrying out of public works. It was formed with an initial capital of 1,100,000 liras subscribed by the principal co-operative societies and consortia. Amongst the local federal organizations which have already become affiliated to it are those of Milan, Genoa, Turin, Ravenna, Bologna, Ferrara, Venice, Grosseto, Rome, Pesaro, and Naples. The Federation has established its technical office in Rome and is organizing the initiation of great works to the value of several million liras.

§ 4. THE AGRICULTURAL CO-OPERATIVE SOCIETIES.

By agricultural co-operative societies we here refer particularly to the collective leases (*affittanze collettive*), with the origin and organization of which we dealt in an article published in our issue of May 1918.

Already before the War they had attained a great development and they now tend to become general and to extend to all the regions of Italy : from Emilia and Romagna to Lombardy, Tuscany, the Roman Campagna, Apulia, Basilicata and Sicily.

The form of management of the land which has given best results is collective management. In this system the labourer-shareholder is also a wage-earner in his own undertaking. Part of the profits of the undertaking go, at the end of the year, to increase his wages. There are, on the other hand, many collective leases with separate management ; these are based on a family system.

We give briefly the statistics relating to the principal organizations for the co-operative cultivation of land.

Beginning with Lombardy, we note in the province of Bergamo the Provincial Federation of Collective Leases (Bergamo) which in 1918 numbered 35 affiliated societies, with 1,934 members, which had leased in all 4,302.469 hectares for a total rental of 701,944 liras.

In the province of Milan, the co-operative societies for the cultivation of land affiliated to the Interprovincial Agricultural Federation had leased in all 907.87 hectares.

In the province of Cremona, in April 1920, the co-operative societies affiliated to the provincial federation had leased about 972 hectares in all.

The movement for the co-operative cultivation of land has recently developed in a remarkable manner also in the province of Mantua, where in 1920 15 co-operative societies cultivate a total area of 2,195.42 hectares.

In the province of Pavia, the Federation of Labour and Agricultural Co-operative Societies also promotes on their behalf the collective leasing of land, and they at present hold 487 hectares.

Passing to Emilia, the societies in the province of Parma affiliated to the provincial federation are 10 in number and cultivated on 31 December 1919 lands of a total area of 1,174.477 hectares, for which they paid rent amounting to 230,554 liras.

In the province of Reggio Emilia, the co-operative movement culminates in the provincial federation which does not confine itself to organizing and assisting affiliated societies, but itself takes up land to cultivate it either directly or in partnership with other co-operative societies. The lands so held now amount to 1,445 hectares.

To the Federation of Agricultural Co-operative Societies of the Province of Modena belong 10 societies which cultivate a total of 709.175 hectares.

In the province of Bologna, too, there is a central organization of agricultural co-operation, the Bolognese Provincial Consortium of Agricultural Co-operative Societies, which assists the affiliated societies in the conclusion of leases and provides for the keeping of their accounts, as well as undertaking the direct management of land. The total area cultivated by the Consortium and by the affiliated societies on 31 December 1918 was 1,795.456 hectares.

The agricultural co-operative movement in the province of Ravenna

is represented by two distinct groups of societies of different political character — the group of the Federation of Co-operative Societies, which is socialist, and the group of the Independent Consortium of the Co-operative Societies of the Province of Ravenna, which is republican. The societies belonging to the Federation were 19 in number on 31 August 1919 and were cultivating 2,499.14 hectares; those belonging to the Consortium were 11 in number on 31 December 1918 and were cultivating about 2,000 hectares.

In the province of Ferrara the movement is still in its initial stage; on 31 December 1919 there were 8 co-operative societies cultivating in all 1,061.146 hectares.

The central organization of the majority of the collective leases in Italy is the National Federation of Agricultural Co-operative Societies, with headquarters at Bologna, which gives assistance in technical matters and in regard to book-keeping and provides for the general direction of the movement. It has also established a commercial agency for supplying the affiliated societies with machines, implements and manures of the best quality and at the lowest possible prices.

Besides leasing land belonging to public bodies, the agricultural co-operative societies have recently seen opening up before them the prospect of a new and important field of action in the occupation and cultivation of uncultivated or badly cultivated lands.

The economic crisis resulting from the War has given prominence to the idea of utilizing the land to the fullest possible extent, cultivating or improving the cultivation of lands which have hitherto remained uncultivated or have been badly cultivated. This principle was applied in practice by the requisition or expropriation of such lands, under rules laid down by special laws, or even by the actual occupation by agricultural labourers of uncultivated or badly cultivated lands, such occupation being afterwards regulated by special laws.

The legislation to this effect is based on the dual principle of obtaining, on the one hand, a better utilization of uncultivated or badly cultivated lands, assigning them temporarily to the National Institution for Soldiers (*Opera Nazionale dei Combattenti*) (1) which, in its turn, will distribute them amongst labourers' co-operative societies or directly to associations of labourers, such as the associations for the cultivation of communal lands (*Università agrarie*) or to co-operative societies; on the other hand, of preventing violence and regulating the occupation.

Between September 1920 and April, 1920 the following uncultivated and badly cultivated lands were assigned: To the *Opera Nazionale dei Combattenti*, 924 hectares; to the *Università agrarie*, 5,262 hectares; to co-operative societies of ex-soldiers, 6,942 hectares; to agricultural co-operative societies, 12,792 hectares, and to various other bodies, 1,392 hectares.

(1) On the origin and objects of the *Opera Nazionale dei Combattenti* see our issue of June-July 1919.

Passing to other forms of co-operative society, we must note the existence of many societies, also formed by agricultural labourers, for the acquisition of motors, machines and implements required for agricultural purposes and for the collective sale and elaboration of the produce.

We give some examples. In the province of Forlì, the Co-operative Society for the Exportation of Agricultural Produce of Cesena, formed in 1908, now numbers 756 members and has a capital of 42,733 liras. It sold agricultural produce to the value of 336,761 liras in 1918. It encourages amongst its members, who are small farmers, the most rational methods of cultivation.

The Agricultural Federation of Albenga groups 1,500 families of peasants, in order to sell collectively the agricultural produce most widely cultivated in the region and to despatch it to the cities (Turin, Milan, Genoa, Nice). The amount of produce so despatched is about 80,000 quintals a year on the average.

In the province of Ascoli Piceno, a noteworthy example of agricultural co-operation is the Fruit and Vegetable Co-operative Society of Pedaso, formed in 1905 with the object of promoting the rational cultivation of fruit and vegetables and of selling them on the best conditions. It has over 800 members and its annual sales amount to about 200,000 lire.

In the province of Teramo, besides a certain number of mutual live stock insurance societies, there are three co-operative agricultural syndicates; the most important is that of Teramo which in 1918 sold goods to the value of 2,046,845 liras.

In the province of Catanzaro, the Federation of Co-operative Labour Societies and Agricultural Co-operative Societies was recently formed to organize agricultural co-operation. It numbers 11 societies, containing about 3,000 members in all.

In the province of Udine, a characteristic form of society is the agricultural club (*circolo agricolo*), the object of which is to supply the farmers with machines, implements, seeds, manures, etc. These clubs are now 36 in number. They are affiliated to a federation which has its headquarters at Udine and provides for collective purchase, agricultural credit and other aid. As the reader is aware, there were many flourishing dairy societies in Friuli prior to the invasion; these are now being reorganized.

It may be stated, in conclusion, that in the field of agricultural co-operation there has been a general awakening in every part of Italy.

§ 5. THE CO-OPERATIVE DISTRIBUTIVE SOCIETIES.

Passing in review the various groups of co-operative societies, we note that of the distributive co-operative societies about fifty had in 1918 a total turn-over of more than a million liras. The large co-operative societies, the sales of which exceeded 10 million liras were: the Military Union, 74,742,000 liras; the Alliance of Torino, 37,348,000 liras; the Italian Consortium, 20,135,000 liras; the Co-operative Union of Flor-

ence, 20,075,000 liras; the Suburban Co-operative Society of Milan, 12,146,000 liras.

The 50 larger co-operative societies together sold goods to the value of more than 280 million liras in 1918. This figure was greatly exceeded in 1919. The sales of the Co-operative Union of Milan alone amounted to 70,000,000 liras; those of the Alliance of Turin to 40,000,000 liras.

In the field of distribution we must also note the new institutions which the War has brought into being and which, under the name of "autonomous distributive bodies" (*enti autonomi di consumo*), represent an intermediate organization between the free consumers and the municipal institutions. These bodies carried on in many centres a parallel and supplementary work side by side with the State organizations and the communal food control offices (*annone*), and contributed effectively to the improvement of the services of the supply and distribution of food stuffs. It is calculated that the total business done by all the *enti autonomi* in 1918 reached 1,000 million liras. Although they have not succeeded in becoming general and although many of those which were formed gave little evidence of activity, it is certain that they contributed largely to overcoming the serious difficulties of the moment.

MISCELLANEOUS INFORMATION RELATING OF CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

INTERNATIONAL QUESTIONS.

1. THE FIRST INTERNATIONAL CONGRESS OF AGRICULTURAL LABOURERS. — *Le travailleur de la terre*, Paris, November 1920.

The first international congress of agricultural labourers was held at Amsterdam on 17, 18 and 19 August 1920. It comprised 21 delegates, representing 10 countries, and a total strength of 2,103,835 members. The following organizations were represented:

<i>Great Britain.</i> - 1. National Agricultural Labourers' and Rural Workers' Union			180,000	members
2. The Workers' Union.			150,000	»
3. Scottish Farm Servants' Union			30,000	»
<i>Italy.</i> — Federazione nazionale dei lavoratori della terra.			845,625	»
<i>Germany.</i> - - Deutscher Landarbeiter Verband . .			770,000	»
<i>Austria.</i> — Verband der Land und Fortstwirtschaftlichen Arbeiter and Arbeiterinnen . . .			51,000	»

<i>Denmark.</i> — Landerbejdforbundet	39,000	members
<i>Sweden.</i> — Svenska Lantarbetareförbundet . . .	20,000	»
<i>Belgium.</i> — Landarbeidersbond	20,000	»
<i>Holland.</i> — Net. Bond van Arbeiders in het land- bouw tuinbouw en Zuivelberdryf	15,000	»

The Federations of Agricultural Labourers of France, Poland and Czecho-Slovakia which had announced their intention of being represented at the Congress, sent a message to the effect that financial hindrances and passport difficulties made it impossible for them to send delegates.

Spain stated that the defective centralization of the agricultural trade union movement made it impossible for her to send representatives.

The Congress decided to form an International Federation, to be thus denominated: International Landworkers' Federation; Fédération internationale des travailleurs de la terre; Internationale Landarbeiter Federation. Its headquarters are to be in Holland. The subscription for the groups joining it is fixed at 9 florins per 1000 members for the latter half of 1920. This amount is to be calculated at the pre-war rate of exchange so that the subscription will be 18 Austrian crowns, 13 Swedish crowns, 18 francs, 18 liras, 15 marks, 15 shillings.

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2 AN INTERNATIONAL AGRICULTURAL SYNDICATE — *La Démocratie Nouvelle*.
Paris, 20 November 1920

An international conference of agricultural syndicates has recently been held in Paris, at the head office of the Central Union of Syndicates of French Agriculturists, 8, Rue d'Athènes, with a view to the formation of an International Agricultural Syndicate.

This organization has become necessary because of the formation of other international organizations — industrial, commercial and labour. It seemed indispensable to have an organization which should represent agricultural interests before international bodies by which questions connected with the organization of labour may be discussed. Besides the present economic conditions require that on every ground the interests of agriculturists should be defended, in order to suppress commercialism and to intensify production.

A temporary office has been established under the presidency of M. Delalande, president of the Central Union of Agricultural Syndicates (France). The general secretariate has been provisionally established in Paris, and placed in charge of M. Adrien Toussaint, general delegate of the Central Union of the Agricultural Syndicates of France.

CZECHO-SLOVAKIA.

1. THE RAIFFEISEN BANKS IN BOHEMIA, MORAVIA, AND SILESIA ON
1 NOVEMBER 1918 — MANUEL STATISTIQUE DE LA RÉPUBLIQUE TCHÉCO-SLOVAQUE
Prague, 1920.

The financial section of the Czecho-Slovak Office for Preparation for the Peace Conference has summarized as follows the position of the Raiffeisen banks of Bohemia, Moravia, and Silesia on 1 November 1918.

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2. ESTABLISHMENT OF A CENTRAL FEDERATION OF GERMAN AGRICULTURAL CO-OPERATIVE SOCIETIES OF CZECHO-SLOVAKIA. — *Deutsches landwirtschaftliches Genossenschaftsblatt*, 23rd year, No. 4. Prague, 20 February 1920

After the fall of the Austro-Hungarian monarchy the federations of German agricultural co-operative societies in Czecho-Slovakia were found to be in need of a central organization which would represent their com-

mon interests, which would co-ordinate their action and maintain contact between them. A project for the foundation of a Central Federation was discussed in 1919, and such a federation was finally formed on 6 February 1920 under the name of the Union of the German Agricultural Co-operative Societies. It is composed of the already existing federations of German co-operative societies.

The value of the membership shares was fixed at 1,000 crowns, and the corresponding guarantee at 5,000 crowns per shares. The number of shares to be taken is proportionate to the number of members in each federation; a share must be taken for each 50 members.

The headquarters of the Union are at Prague.

GERMANY.

1. GENERAL MEETING OF THE GERMAN NATIONAL FEDERATION OF AGRICULTURAL, CO-OPERATIVE SOCIETIES. — *Deutsche landwirtschaftliche Genossenschafts-presse* No. 18, Berlin, 30 September 1920. *Landwirtschaftliche Genossenschaftsblatt* No. 19, Neuwied, 15 October 1920.

The 34th Congress of German Agricultural Co-operative societies took place at Cologne on 15 and 16 September. The Congress opened with a lecture on the development of agricultural co-operation in Rhenish Prussia. It appeared that the increase of the agricultural co-operative societies in that province was not so great in the last decade as in other provinces: the number rose from 2,022 in 1910 to 2,202 on 1 January 1920. The cause of the slower development was to be found in the fact that Rhenish Prussia is the cradle of the co-operative movement, and it had already attained to a great development.

The annual report on the general situation of agricultural co-operation in the Empire in 1919-20 was then presented. The increase had never been so great as in that year; no fewer than 3,421 agricultural co-operative societies had been formed. But from the total number have to be deducted 427 societies which had been dissolved and 2,318 societies in territories in the north, east and west which, as a result of the Peace Treaty, ceased to belong to Germany. These were divided as follows: 65 in East Prussia; 412 in West Prussia; 939 in Posen; 139 in Schleswig-Holstein and 763 in Alsace-Lorraine. The net increase in the number of agricultural co-operative societies was, therefore, 676.

In regard to the collaboration between the agricultural co-operative societies and other economic organizations, it was stated that the co-operative societies were well disposed to work together with the class and economic organisations of the rural population for the benefit of that population. They asked, however, for the possibility of free and independent development within the limits of their own field of action.

The aid given by the agricultural co-operative societies in the gradual abolition of the limitations placed on the public economy is worth noting.

Such aid was given particularly in connection with the contracts for the supply of potatoes.

The situation of the 2,138 dairy societies affiliated to the National Federation still remains serious. Some improvement in their position is expected from the suppression of all restrictions relating to contracts.

As to the spirit which animated the meeting, it is sufficient to note the following passage from the report: "Between capitalism and socialism, the two opposing forces so often spoken of to-day, co-operation represents the golden mean. The future is with free co-operation. On this road all groups may meet; only thus can they proceed together in peaceful work on behalf of the whole people, producer and consumer alike."

It was decided to hold next year's General Meeting of the Federation at Lübeck.

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2. THE POSITION OF THE AGRICULTURAL CO-OPERATIVE SOCIETIES ON 1 AUGUST 1920. — *Deutschelandwirtschaftliche Genossenschaftspress*, No. 16, Berlin, 30 August 1920.

According to a statement published in the *Deutscher Reichsanzeiger* 389 co-operative societies were formed in July 1920, of which 197 were agricultural societies. They may be thus classified:

- 69 agricultural banks;
- 39 societies for purchase and sale;
- 4 co-operative dairies;
- 85 miscellaneous co-operative societies.

The form of limited liability was adopted by 26 agricultural banks, 35 societies for purchase and sale, and 74 miscellaneous societies. The remainder adopted the form of unlimited liability.

The number of societies dissolved was 24, thus classified:

- 5 agricultural banks;
- 1 society for purchase and sale;
- 1 co-operative dairy;
- 17 miscellaneous societies.

The net increase in the number of agricultural co-operative societies was thus 173.

On 1 August 1920, 1,555 societies were removed from the list of agricultural co-operative societies of the German Empire as no longer belonging to the Empire on account of the cessions of territory in East Prussia, West Prussia, Posen and Schleswig-Holstein. Taking account of this fact,

there were on 1 August 1920, according to the statistics of the German National Federation of Agricultural Co-operative Societies.

86 central co-operative societies ;
 18,379 agricultural banks ;
 3,781 societies for purchase and sale ;
 3,311 co-operative dairies ;
 6,276 miscellaneous societies.

or 31,833 agricultural co-operative societies in all.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN SCOTLAND IN 1918 AND 1919. — REPORTS OF THE SCOTTISH AGRICULTURAL ORGANIZATION SOCIETY FOR THE PERIODS FROM 1ST JANUARY TO 31ST DECEMBER 1918 AND FROM 1ST JANUARY TO 31ST DECEMBER 1919. Edinburgh, 1919 and 1920. — *The Scottish Smallholder*, Vol. VII, Nos. 78 and 79. Edinburgh, 1 March and 1 April 1920.

The promotion of agricultural co-operation in Scotland is carried on by two propagandist bodies, the Scottish Agricultural Organisation Society and the Scottish Smallholders Organisation. Of these the former organizes co-operation amongst all classes of farmers; the latter only amongst small holders. While the Scottish Agricultural Organisation Society publishes full reports, the Smallholders Organisation has not, hitherto, issued reports containing details of the work of the societies it has formed.

The Scottish Agricultural Organisation Society. — Partially arrested during the War, the work of this society began to show renewed activity even before its conclusion.

The Society receives a grant from the Development Fund equal in amount to the total sums received from other sources, with a maximum limit of £1000. In 1918 the grant was £755 and in 1919, £842. In the latter year the Society also received a grant of £150 from the Board of Agriculture for Scotland for the purpose of appointing a Gaelic-speaking organizer.

General Progress. — In 1918, 21 new agricultural co-operative societies were formed and in 1919, 19 new societies.

The total number of affiliated societies at the end of 1919 was 174.

The following table gives statistics of the membership, share capital, and turnover of the societies in 1918 and 1919. The statistics being by no means complete (especially those for 1919) we give in respect of each item the number of societies to which it relates.

TABLE I. — *Membership, Share Capital and Turnover of Societies affiliated to the Scottish Agricultural Organisation Society.*

	1918		1919	
	Number of Societies furnishing returns	Total	Number of Societies furnishing returns	Total
Membership	120	10,961	71	7,864
Paid-up Share Capital	112	£ 23,016 6 1	69	£ 17,052 10 4
Trade Turnover:				
Poultry and Eggs	48	115,644 19 4 1/2	31	86,422 15 0 1/2
Dairy Produce	9	410,606 1 1 1/2	2	123,390 18 2
Agricultural Produce and Requisites	97	355,625 4 8 1/2	61	373,032 11 4 1/2
Total Turnover	102	884,881 5 2 1/2	66	584,846 4 7

Co-operative Dairy Societies. — The co-operative dairy societies which, for the most part, take the form of milk-depots, continue to be notably successful. Being treated in a manner which enables it to be conveyed long distances with safety, the milk handled by a well-equipped co-operative depot finds a less restricted market than does that of the ordinary individual dairy farm. Losses from over-supply and fluctuating demand are also largely avoided since the depots make arrangements for the profitable utilization of surplus milk and so are able to supply the distributors in quantities suited to varying requirements.

The following table shows the turnover of seven of the largest co-operative dairy societies in Scotland from 1912 to 1914 and from 1917 to 1919. Figures for 1915 and 1916 are not available, as the Scottish Agricultural Organisation Society did not collect statistics for those years.

The Galston Co-operative Association (Ayrshire) may be taken as typical of the co-operative milk-depots. It handles about 4,000 gallons of milk per day in summer and about 2,000 gallons per day in winter. Of the summer milk 2,000 gallons are conveyed by motor lorry to Glasgow and 2,000 gallons are made into cheese. The cost of transport of the milk is about 1d. per gallon. For the utilization of the by-products of cheese-making the Association has erected a piggery at which it feeds nearly 300 pigs.

A federation of the co-operative milk-depots regulates the trade of the various societies, prevents injurious competition between them and

TABLE II. — *Turnover of the Larger Co-operative Dairy Societies.*

Name of society	Date of registration	Turnover					
		1912	1913	1914	1917	1918	1919
		£	£	£	£	£	£
Dunlop	1908	16,123	16,510	16,935	33,501	45,089	58,647
Lugton	1908	13,999	14,634	14,808	29,055	36,981	50,501
Rowallan	1908	13,082	13,536	14,185	28,936	40,000	—
Stewarton	1910	16,796	19,390	21,355	40,906	56,716	—
Kilmaurs	1910	17,832	18,212	17,738	57,497	70,764	80,331
Fenwick	1911	—	—	—	22,331	25,453	44,720
Galston	1815	—	—	—	46,781	79,000	—

takes steps to promote their joint action and to secure their common interests.

Egg-collecting Societies. — The societies for the collection and sale of eggs are also very successful. They were formed in districts where small holdings prevail and many of them are to be found in the islands. In the island of South Uist there are nine such societies and in 1918 they sold eggs to the value of £7,241. The total rental of the districts covered by these societies is only £3,556, or less than half the value of the eggs sold.

The turnover of 14 typical egg-collecting societies was £24,671 in 1918 and £24,052 in 1919. The apparent falling-off was more than accounted for by the control of prices; in 1919 the prices for first grade eggs ranged from 2s. 10d. to 5s. per dozen and in 1918 from 3s. to 6s. 1d., the last-mentioned price being obtained before the control was established.

The Farm and Poultry Produce Federation acts as a selling agency for the egg-collecting societies. Its turnover fell from £54,282 in 1918 to £46,916 in 1919 but this is explained by the difference in prices and by the fact that, owing to the control, the societies were enabled to obtain the same prices at their own doors as they could obtain through the Federation, so that for a time it was only the surplus which was sent to the Federation.

Marketing and Preservation of Fruit. — Under a scheme approved by the Ministry of Food, societies were formed during the War in certain districts for the preservation, by bottling or in the form of jam, of quantities of fruit which, while too small to be usefully marketed separately, were in excess of the amounts for which sugar could be obtained by individual growers. The societies collected the surplus fruit from the small growers and where transport was convenient sent it to jam factories. In other cases committees of ladies converted the fruit into jam. Though started as a war measure, it is hoped that these societies will serve a lasting purpose.

Purchase of Requisites. — The societies for the supply of agricultural

equisites did a total business of about £750,000 in 1918 and in 1919 there was a substantial increase in the volume of business transacted, notably in the purchase of fertilizers.

The Scottish Agricultural Organisation Society gives considerable assistance to those of its affiliated societies of which the members are for the most part small holders in obtaining quotations for supplies of feeding stuffs, manures and other commodities. The larger societies usually make their own arrangements but are advised as to the best available sources of supply and quotations are obtained for them if they so desire.

In the Orkney Islands and in the West and South of Scotland, there are Joint Committees for Purchase, by means of which local societies obtain the advantages which result from combining the buying orders of a wide district. The purchase of agricultural seeds through these committees showed a considerable increase in 1919.

New Developments. - - Five societies had, by the end of 1919, adopted schemes for the acquisition of mechanical haulage and threshing plant.

Difficulty having been experienced in obtaining the services of competent blacksmiths in certain districts the local societies have undertaken the provision of co-operative smithies.

The Scottish Smallholders Organisation. - This Society was formed in 1913. Its professed objects are the education of small holders and the development of "group consciousness" among them, and the promotion of co-operation is an essential part of its programme. In the Report presented to the annual general meeting held in March 1918 it was stated that 160 registered trading societies had been formed, besides 7 local credit societies, 26 stock breeding societies and 24 live stock insurance societies. In addition about 80 local committees had been formed, which do some trading and may eventually become registered societies. A year later the number of registered societies had risen to 200. The Smallholders Organisation has formed three central agencies - - the Scottish Central Markets, Ltd., through which the local societies can buy their requisites and sell their produce; the Scottish Central Land Bank, Ltd., which had made advances to local credit societies chiefly for the purpose of assisting their members to purchase sheep under schemes of the Board of Agriculture for Scotland; and the Scottish Central Insurance Society, Ltd., which was established in 1916 and has as its principal object the development of a live stock insurance scheme with low-rated premiums for members of local societies affiliated to the Smallholders Organisation. Some particulars of the working of these three agencies were given in our issue of June 1918.

SWITZERLAND.

THE SWISS PEASANTS' UNION AND THE SWISS PEASANTS' SECRETARIAT IN 1919.
-- VINGT-DEUXIÈME RAPPORT ANNUEL DU COMITÉ DIRECTEUR DE L'UNION SUISSE DES PAYSANS ET DU SÉCRÉTARIAT DES PAYSANS SUISSES, Publications du Secrétariat des paysans suisses, No. 59, Bienne, 1920.

At the beginning of the business year 1919, the Swiss Peasants' Union numbered 31 sections with a total of 263,412 members. In 1918 there were

32 sections and 244,120 members ; thus for 1919 there was an increase of 91,120 members as compared with 1918. During the year 11 new sections were added to the 31, but as these sections did not pay their quota until 1920 they are not counted with those of 1919. The societies of the Union which show a considerable increase in numbers over 1918 are the following :

	1918	1919
Swiss Agricultural Society	65,809	70,365
Federation of the Agricultural Societies of Romance Switzerland	28,229	32,856
Federation of the Cheese-making Societies of North-west Switzerland	7,687	10,000
Federation of the Societies for the Utilization of Milk of Central Switzerland	6,800	8,000
Argau Federation of Cheese-making Societies	4,560	5,640
Thurgau Federation of Cheese-making Societies	6,030	7,000

The year 1919 was characterized in Switzerland by the revocation of many provisions made to meet the conditions of war economy, and the Union insisted successfully on the abolition of special regulations made by the Federal Council on agricultural questions.

On the question of the introduction of voluntary insurance against accidents, the Union formulated the wishes of agriculturists, but the last word belongs to the National Assembly, which has not yet come to a decision on this subject.

To all questions in which agriculture is interested the Union has brought its contribution of experience, inquiries, and activity. Thus proposals have been brought forward respecting the customs tariff, the new financial provisions for the benefit of the Confederation, the institution of a bank to give financial guarantees to agricultural labourers and small farmers, insurance against old age and invalidity, the institution of a central office of the federations of agricultural syndicates, the cattle census of 1920, the foundation of a Swiss Institute of Public Economy, etc.

Equally efficacious were the labours of the offices depending on the Union: the *Office of Information respecting Prices*; the *Estimate Office*, to which was added a service to act as intermediary in purchases, sales and lettings of rural holdings; the *Office of Information as to Insurance against Accidents and Illness*; the *Office of Agricultural Works*, and the *Office for Consultation as to Agricultural Machinery*.

The Swiss Peasants' Secretariate in 1919 worked according to this programme : (1) Preparatory labours in view of the revision of the customs tariff and commercial treaties ; (2) researches into the returns of Swiss agriculture ; (3) researches in regard to double book-keeping ; (4) collection of model rules and forms in use by agricultural associations ; (5) publication of a model letting agreement ; (6) re-organisation of the archives and of the library ; (7) inquiry into the wages of agricultural labourers ; (8) inquiry into the state of association with regard to every crop.

Part II: Insurance and Thrift

FRANCE.

AGRICULTURAL, MUTUAL, INSURANCE FROM 1914 TO 1919.

SOURCE (OFFICIAL):

RAPPORT DU MINISTRE DE L'AGRICULTURE AU PRÉSIDENT DE LA RÉPUBLIQUE FRANÇAISE
SUR LE FONCTIONNEMENT DES SOCIÉTÉS D'ASSURANCES ET DE RÉASSURANCES MUTUELLES
AGRICOLLES DE 1911 À 1919. Paris, 1920.

Agricultural mutual insurance societies suffered heavily from the war, not only in the invaded regions, where many of them have completely disappeared, but throughout the whole of the country. Many of the managers and treasurers of these associations were mobilized. As a general rule, it was impossible for the remaining agriculturists, old men, women and children, anxious, before all else, to perform day by day the most urgent labours, to take the place of the absent ones in carrying on agricultural mutual insurance institutions. Besides this, the scourges, usually so much dreaded by agriculturists, fire, hail, cattle disease, etc. constituted a menace much less terrible than that which was hanging over them throughout the war. During the war years the attention of cultivators was much less turned towards the necessity of insuring crops and cattle, and this state of affairs was not favourable to the extension of insurance institutions. Notwithstanding this, on 31 December 1919, instead of a total number of 11,687 societies, which were in existence in 1912, we find 14,400 societies which had received subsidies. This shows how great was the vitality of these associations, and what would have been their progress had these seven years been years of peace. It must also be observed that a certain number of societies which had ceased working have been re-constituted.

The legislature, desirous of encouraging in every way the organization and development of mutual insurance against the various agricultural risks, has continued each year to place at the disposal of the Minister of Agriculture credit to allow of granting subsidies to these societies. But this credit, which up to 1914 was continually increasing (at that time it was 1,540,000 francs) was considerably reduced during the war years: for 1918 it was not more than 500,000 francs. As soon as the war was over the legislature again showed its desire to encourage agricultural mutual insurance as largely as before, by granting a credit for this purpose, of 900,000 francs, increased to 1,400,000 francs in the budget of 1920. This encouragement is reserved for societies which re-insure their risks, to the exclusion of those which prefer to remain isolated. For the local

mutual societies existing or about to be founded in a department or district where as yet there is no re-insurance society, there is the possibility of re-insuring in one of the societies in Paris which re-insure directly local societies which are not situated within the sphere of action of any re-insurance society, until such an institution can be formed.

By virtue of a decree of 16 March 1920 subsidies are granted on the advice of a permanent distribution committee, composed of representatives of Parliament, of constituted bodies and great administrations of the State, as well as of the associations directly interested. This committee may also be consulted as to various questions of a general character concerning the organization and working of agricultural mutual insurance and re-insurance institutions.

§ 1. DEVELOPMENT OF THE SOCIETIES.

The 14,400 agricultural mutual insurance societies scattered throughout the whole territory may be thus divided :

Societies subsidized on			
31 December 1897. .	1,484	Societies formed in 1906	977
Societies formed in 1898	110	" " 1909	784
" " 1899	341	" " 1910	676
" " 1900	342	" " 1911	963
" " 1901	396	" " 1912	884
" " 1902	460	" " 1913	902
" " 1903	737	" " 1914	578
" " 1904	1,105	" " 1915	68
" " 1905	1,116	" " 1916	48
" " 1906	1,138	" " 1917	38
" " 1907	1,048	" " 1918	68
		" " 1919	127

These societies may be subdivided as follows according to the risks which they cover :

Societies for insurance against mortality of live-stock . . .	10,071
Societies for re-insurance against mortality of live-stock . .	76
Societies for insurance against risks of fire in agriculture . .	4,124
Societies for re-insurance against risks of fire in agriculture .	35
Societies for insurance against hail	28
Societies for insurance against accidents in agriculture . . .	65
Societies for re-insurance against accidents in agriculture .	1

The number of societies varies considerably from department to department. Landes comes first with 1270 societies, then Haute-Marne with 817, Haute-Saône (578), Basses-Pyrénées (518), Pas de Calais (430), Vosges (400), Jura (394), Doubs (392), Isère (388). Corsica comes last with three. The position of each department for each class of society is shown in the following table.

TABLE I. — *Distribution according to Departments and Nature of Risks Covered of Agricultural Mutual Insurance Societies which have Received Subsidies up to 31 December 1919.*

DEPARTMENTS	SOCIÉTÉS							TOTAL in depart- ment
	insuring against mortal- ity of live- stock	insuring against fire	insuring against hail	insuring against accidents		live- stock re-in- surance	fire re-in- surance	
				local	re-in- surance			
Ain	243	83	1	4	—	1	1	333
Aisne	73	55	—	—	—	2	1	131
Allier	37	21	—	—	—	1	1	60
Alpes (Basses-)	47	19	—	—	—	1	—	67
Alpes (Hautes-)	99	47	—	—	—	1	—	147
Alpes-Maritimes	13	—	1	—	—	—	—	14
Ardèche	64	101	—	—	—	—	1	166
Ardennes	83	—	1	—	—	1	—	85
Ariège	53	6	1	—	—	—	—	60
Aube	79	177	1	—	—	1	1	259
Aude	23	49	—	—	—	—	—	72
Avoyron	10	140	—	—	—	1	2	153
Bouches-du-Rhône	5	29	—	—	—	—	—	34
Calvados	21	2	—	—	—	—	—	23
Cantal	8	12	—	—	—	—	—	20
Charente	114	—	—	—	—	—	—	114
Charente-Inférieure	138	19	—	—	—	—	—	157
Cher	45	—	—	—	—	1	—	46
Corrèze	30	8	1	—	—	1	—	40
Corsica	3	—	—	—	—	—	—	3
Côte-d'Or	159	45	1	—	—	1	—	206
Côtes-du-Nord	88	7	—	—	—	1	—	96
Creuse	24	5	1	—	—	1	—	31
Dordogne	47	4	1	—	—	—	1	53
Doubs	266	123	—	—	—	2	1	392
Drôme	92	198	—	—	—	1	—	291
Eure	42	—	—	—	—	1	—	43
Eure-et-Loir	196	—	—	1	—	3	—	200
Finistère	99	40	—	—	—	1	—	140
Gard	7	61	—	—	—	—	—	68
Carried forward . .	2,208	1,251	9	5	—	22	9	3,504

TABLE I (continuation). — *Distribution according to Departments and Nature of Risks Covered of Agricultural Mutual Insurance Societies which have Received Subsidies up to 31 December 1919.*

DEPARTMENTS	SOCIETIES							TOTAL number in depart- ment
	insuring against mortal- ity of live- stock	insuring against fire	insuring against hail	insuring against accidents		live- stock re-in- surance	fire re-in- surance	
				local	re-in- surance			
<i>Brought forward . . .</i>	2,208	1,251	9	5	—	22	9	3,504
Haute-Garonne	110	18	—	—	—	1	1	130
Gers	196	49	—	—	—	2	1	248
Gironde	73	76	1	—	—	—	1	151
Hérault	1	67	—	—	—	—	1	69
Ille-et-Vilaine	109	8	—	—	—	1	—	118
Indre	9	—	—	1	—	—	—	10
Indre-et-Loire	96	1	—	53	1	—	—	151
Isère	206	181	—	—	—	1	—	388
Jura	292	100	—	—	—	1	1	394
Landes	1,255	13	2	—	—	—	—	1,270
Loir-et-Cher	169	—	—	—	—	1	—	170
Loire	33	142	—	—	—	1	1	177
Loire (Haute-)	28	5	—	—	—	1	—	34
Loire-Inférieure	138	13	—	—	—	—	—	151
Loiret	180	—	—	—	—	1	—	181
Lot	99	14	—	—	—	1	—	114
Lot-et-Garonne	32	12	1	—	—	—	—	45
Lozère	39	39	—	—	—	1	—	79
Maine-et-Loire	68	3	—	1	—	—	—	72
Manche	80	—	—	—	—	—	—	80
Marne	26	—	1	—	—	1	—	28
Marne (Haute-)	381	432	1	—	—	2	1	817
Mayenne	21	3	—	—	—	—	1	25
Meurthe-et-Moselle	204	59	1	—	—	1	—	263
Meuse	132	—	1	—	—	1	1	134
Morbihan	27	9	—	—	—	1	—	37
Nièvre	13	5	—	—	—	—	—	18
Nord	101	9	1	—	—	2	—	113
Oise	10	—	—	—	—	—	—	10
<i>Carried forward . . .</i>	6,336	2,509	18	60	1	41	18	8,983

TABLE I (continuation). — *Distribution according to Departments and Nature of Risks Covered of Agricultural Mutual Insurance Societies which have Received Subsidies up to 31 December 1919.*

DEPARTMENTS	SOCIETIES							TOTAL number in depart- ment
	insuring against mortal- ity of live- stock	insuring against fire	insuring against hail	insuring against accidents		live- stock re-in- surance	fire re-in- surance	
				local	re-in- surance			
<i>Brought forward . . .</i>	6,336	2,509	18	60	1	41	18	8,983
Orne	39	2	—	—	—	1	—	42
Pas-de-Calais	308	116	—	—	—	5	1	430
Puy-de-Dôme	134	21	—	—	—	1	1	157
Pyrénées (Basses-)	289	227	—	—	—	—	2	518
Pyrénées (Hautes-)	82	65	1	—	—	1	1	150
Pyrénées-Orientales	6	56	—	—	—	—	—	62
Rhin (Haut-)	49	25	—	—	—	1	1	76
Rhône	77	114	—	—	—	2	2	195
Saône (Haute-)	418	156	1	—	—	2	1	578
Saône-et-Loire	224	43	—	—	—	2	—	269
Sarthe	90	—	—	1	—	1	—	92
Savoie	206	93	—	—	—	1	—	300
Savoie (Haute-)	227	108	—	—	—	1	1	337
Seine	1	1	1	—	—	3	2	8
Seine-Inférieure	93	—	—	—	—	8	—	101
Seine-et-Marne	50	4	—	—	—	—	—	54
Seine-et-Oise	79	1	—	1	—	—	—	81
Sèvres (Deux)	85	240	1	2	—	1	1	330
Somme	338	—	1	—	—	1	—	340
Tarn	49	35	—	—	—	—	1	85
Tarn-et-Garonne	35	—	—	—	—	—	—	35
Var	43	21	—	—	—	1	—	65
Vaucluse	4	101	—	—	—	—	1	106
Vendée	240	4	—	—	—	1	—	245
Vienne	19	9	1	1	—	—	1	31
Vienne (Haute-)	35	18	2	—	—	—	1	56
Vosges	248	150	1	—	—	1	—	400
Yonne	267	5	1	—	—	1	—	274
<i>Total . . .</i>	10,071	4,124	28	65	1	76	35	14,400

§ 2. MUTUAL LIVE STOCK INSURANCE SOCIETIES.

Among mutual insurance societies which have received subsidies, the most numerous are those against mortality of live-stock. They number 10,071.

The table below shows the progress since 1897 of assisted mutual insurance companies against mortality in cattle.

TABLE II. — *Progress of Mutual Live Stock Insurance Societies.*

On 31 December	Number of societies	Number of members	Value of capital insured frances
1897	1,469	87,072	59,168,334
1898	1,578	94,546	62,449,269
1899	1,917	117,292	86,724,510
1900	2,264	135,817	106,807,194
1901	2,646	155,496	129,775,867
1902	3,102	178,920	158,999,954
1903	3,811	209,490	194,031,403
1904	4,824	275,576	278,960,543
1905	5,765	318,146	330,545,429
1906	6,422	346,901	372,815,500
1907	6,982	389,478	417,477,023
1908	7,569	403,984	471,311,340
1909	8,044	424,633	513,532,254
1910	8,380	456,561	557,887,608
1911	8,869	473,747	605,251,815
1912	9,270	488,357	624,205,530
1913	9,681	501,946	632,735,557
1914	9,971	503,723	628,994,520
1915	9,998	506,003	645,091,810
1916	10,008	506,499	645,747,550
1917	10,014	499,725	645,183,993
1918	10,021	500,784	646,281,885
1919	10,071	503,056	649,179,705

The number and importance of the societies in the various departments are shown below :

TABLE III. — *Position according to Departments
of Mutual Live Stock Insurance Societies on 11 December 1919.*

Departments	Societies	Members	Capital insured
Ain	243	14,157	18,409,325
Aisne	73	2,004	2,722,960
Allier	37	1,139	1,881,945
Alpes (Basses-) . .	47	1,142	1,099,600
Alpes (Hautes-) . .	99	4,434	3,697,077
Alpes-Maritimes . .	13	934	698,450
Ardèche	64	1,691	1,170,260
Ardennes	83	2,463	4,937,770
Arège	53	2,596	2,672,935
Aube	79	4,139	5,550,690
Aude	23	931	1,021,500
Aveyron	10	186	510,995
Bouches-du-Rhône .	5	465	533,325
Calvados	21	795	2,143,190
Cantal	8	265	1,066,085
Charente	114	13,874	11,851,840
Charente-Inférieure	138	13,069	12,859,435
Cher	45	1,414	2,471,225
Corrèze	30	1,220	1,271,695
Corsica	3	106	54,015
Côte d'Or	159	6,828	11,606,335
Côtes-du-Nord . . .		11,335	12,326,540
Creuse	24	795	1,256,515
Dordogne	47	3,333	5,087,070
Doubs	266	6,187	13,383,228
Drôme	92	7,025	6,725,288
Eure	42	1,790	5,814,380
Eure-et-Loire . . .	196	22,054	37,792,842
Finistère	99	8,293	14,235,470
Gard	7	432	281,750
Garonne (Haute-) .	110	2,293	3,901,810
Gers	196	7,237	10,910,904
Gironde	73	5,760	3,764,530
Hérault	1	15	17,100
Ile-et-Vilaine . . .	109	6,916	8,610,680
Indre	9	483	1,250,740
Indre-et-Loire . . .	96	8,378	13,674,325
Isère	206	2,601	7,693,560
Jura	292	9,980	15,520,350
Landes	1,255	64,552	29,020,892
Loir-et-Cher	169	12,116	10,293,510
Loire	33	945	1,456,750
Loire (Haute-) . . .	28	1,255	676,465
Loire-Inférieure . .	138	13,980	22,548,320
Loiret	180	9,118	9,809,340

Carried forward . . . 5,103 280,725 324,283,011

TABLE III (continuation). — Position according to Departments
of Mutual Live Stock Insurance Societies on 31 December 1919.

Departments	Societies	Members	Capital insured frances
<i>Brought forward</i>	5,103	280,725	324,283,011
Lot	99	4,213	4,099,640
Lot-et-Garonne	32	1,637	2,111,515
Lozère	39	551	449,030
Maine-et-Loire	68	5,591	8,797,085
Manche	80	7,391	13,269,025
Marne	26	1,969	2,294,775
Marne (Haute-)	381	6,606	12,952,750
Mayenne	21	2,246	5,891,125
Meurthe-et-Moselle	204	6,622	6,394,270
Meuse	132	3,748	4,536,330
Morbihan	27	2,258	2,007,485
Nièvre	13	418	784,170
Nord	101	4,812	11,213,265
Oise	10	177	908,990
Orne	39	3,566	8,594,139
Pas-de-Calais	308	9,003	10,852,695
Puy-de-Dôme	134	3,391	3,242,220
Pyrénées (Basses-)	289	11,598	13,083,773
Pyrénées (Hautes-)	82	2,542	2,853,060
Pyrénées-Orientales	6	198	302,725
Haut-Rhin	49	1,842	1,772,350
Rhône	77	2,824	3,317,215
Haute-Saône	418	2,682	15,922,850
Saône-et-Loire	224	18,108	10,338,445
Sarthe	90	8,179	10,174,745
Savoie	206	9,225	9,251,842
Savoie (Haute-)	227	14,899	17,305,170
Seine	1	92	81,740
Seine-Inférieure	93	2,845	5,349,010
Seine-et-Marne	50	2,214	8,349,010
Seine-et-Oise	79	3,695	6,718,325
Sèvres (Deux-)	85	4,341	14,602,875
Somme	338	11,940	11,893,940
Tarn	49	970	1,223,015
Tarn-et-Garonne	35	1,140	1,918,410
Var	43	975	1,555,070
Vaucluse	4	320	233,710
Vendée	240	24,077	33,786,280
Vienne	19	1,257	26,632,635
Vienne (Haute-)	35	1,718	3,513,075
Vosges	248	11,175	10,145,175
Yonne	267	12,326	17,097,735
<i>Total</i>	10,071	503,056	649,179,905

As will be seen, the departments at present containing the largest number of mutual live stock insurance companies which have received subsidies are: Landes (1,255), Haute-Saône (418), Haute-Marne (381), Somme (338), Pas de Calais (308), Jura (292) and Basses-Pyrénées (289).

In the second degree we find the re-insurance societies, the progress of which is shown in the following table :

TABLE IV. — *Progress of Subsidized Live Stock Re-insurance Societies.*

Years	Number of re-insurance societies	Number of affiliated local societies	Value of capital re-insured
			francs
1901	6	106	4,581,770
1902	10	203	8,708,240
1903	14	631	17,687,184
1904	18	917	32,413,226
1905	29	1,373	61,853,075
1906	33	1,719	86,956,688
1907	44	2,200	105,856,975
1908	53	2,731	124,671,437
1909	55	2,886	133,168,042
1910	58	3,055	153,900,785
1911	65	3,413	172,147,315
1912	68	3,518	174,245,128
1913	71	3,620	176,355,440
1914	75	3,335	158,240,000
1915	75	3,250	147,240,000
1916	75	3,420	153,250,000
1917	75	3,105	151,345,000
1918	75	2,997	175,240,560
1919	75	2,887	183,414,346

The very variable importance of these societies appears in the above table. Some only comprise two or three affiliated societies, sometimes with less than one hundred members. But it should here be added that besides the regional re-insurance societies there are in the third degree two banks for re-insurance against mortality of live stock, the one subsidized: the National Society for the Re-insurance of Mutual Agricultural Societies, 18 Rue Grenelle, Paris, to which are affiliated 22 departmental or regional re-insurance societies representing 1,731 local societies with 28,825 members and a capital of 77,496,740 francs; the other, not subsidized, is the Central Society for Mutual Agricultural Insurance, 8 Rue d'Athènes, Paris, to which are affiliated 3 regional re-insurance societies and 214 local societies, insuring 7,873 head of cattle for a value of 6,188,136 francs, and 740 horses for a value of 762,275 francs.

TABLE V. — *Subsidiary Live Stock Re-insurance Societies.*

Departments	Names of Societies	Headquarters	Number of affiliated societies	Number of members	Capital insured
					francs
Ain	Fédération des mutuelles bétail de l'arrondissement	Nantua.	39	1,223	5,095,701
Ain	Société mutuelle régionale de l'arrondissement	Vervins.	21	289	1,217,727
Ain	Syndicat union des caisses de l'arrondissement	Château-Thierry.	20	640	421,367
Ailier (Bénes-)	Caisse départementale de réassurance	St-Pourçain-sur-Loire.	18	214	481,793
Alpes (Hautes-)	Do	Digne.	12	216	215,835
Ardenes	Do	Gap.	18	320	685,949
Ardennes	Caisse syndicale départementale	Mézières.	18	320	3,740,066
Aube	Caisse départementale de réassurance	Troyes.	69	1,770	5,474,465
Aveyron	Caisse régionale du Plateau central	Rodez.	82	1,941	3,641,496
Cher	Caisse de réassurance de l'arrondissement	Sancerre.	—	—	683,950
Corrèze	Caisse départementale de réassurance	Tulle.	27	572	489,210
Côte-d'Or	Do	Dijon.	9	233	71,376,147
Côte-du-Nord	Do	Saint-Brieuc.	106	3,461	1,031,980
Creuse	Do	Guéret.	14	433	703,865
Dordogne	Do	Périgueux.	9	1,094	1,021,105
Doubs	Caisse départementale de réassurance (bétail)	Besançon.	82	1,660	6,406,152
Doubs	Caisse départementale de réassurance (chevaux)	Besançon.	41	560	1,129,450
Eure	Caisse de réassurance de l'arrondissement (bétail)	Evreux.	8	194	795,774
Eure-et-Loir	Caisse de réassurance de l'arrondissement (chevaux)	Dreux.	9	549	1,589,824
Eure-et-Loir	Caisse de réassurance de l'arrondissement (bétail)	Dreux.	17	646	2,213,423
Eure-et-Loir	Caisse de la région percheronne	Thiron-Gardiols.	7	261	344,604
Finistère	Caisse départementale	Landerneau.	10	3,200	6,293,050
Garonne (Haute-)	Do	Toulouse.	68	1,182	2,904,403
Gers	Fédération des mutuelles bétail	Auch.	55	1,500	5,498,334
Ille-et-Vilaine	Union générale des mutuelles	Rennes.	12	254	281,202
Isère	Syndicat union de l'arrondissement	Vienna.	44	1,080	1,718,740
Jura	Caisse départementale	Lons-le-Saulnier.	76	2,045	4,681,030
Loire	Do	Saint-Etienne.	8	181	495,198
Loire (Haute-)	Do	Le Puy.	15	314	845,521
Loire-inférieure	Do	Nantes.	13	1,500	1,500,000
Loiret	Do	Orléans.	9	199	304,505
Lot	Do	Cahors.	22	718	1,355,590
Lot-et-Garonne	Do	Agén.	22	820	2,214,512
Lozère	Fédération des caisses locales	Mende.	12	472	1,903,760
Lozère	Caisse syndicale de réassurance	Châlons.	4	577	310,300
Marne	Caisse syndicale des arrondissements de Chaumont et de Wassy	Chaumont.	190	5,866	7,066,496
Marne (Haute-)	Syndicat union de l'arrondissement de Langres	Langres.	128	2,325	8,072,296
Meurthe-et-Moselle	Caisse départementale	Nancy.	143	3,401	3,631,110
	<i>Carried forward</i>		1,143	40,240	99,383,211

TABLE V (continuation). — *Subsidized Live Stock Re-insurance Societies.*

Departments	Names of societies	Headquarters	Number of affiliated societies	Number of members	Capital insured francs
	<i>Brought forward</i>				
Meuse	Fédération de prévoyance.	Bar-le-Duc.	1443	40,240	92,383,211
Morbihan	Caisse départementale.	Auray.	38	569	978,002
Nord	Caisse départementale (espèce bovine)	Lille.	2	39	30,000
Nord	Caisse départementale (espèce chevaline)	Lille.	24	361	734,535
Oise	Société de réassurance.	Beauvais.	37	522	1,112,580
Pas-de-Calais	Caisse de réassurance d'Arras et de Béthune.	Arras.	48	1,441	708,003
Pas-de-Calais	Caisse de réassurance de l'arrondissement	Boulogne-sur-Mer.	138	1,441	2,743,655
Pas-de-Calais	Do	Montreuil-sur-Mer.	8	138	128,130
Puy-de-Dôme	Do	Saint-Omer.	73	221	1,407,300
Hautes-Pyrénées	Caisse départementale de réassurance	Saint-Pol.	32	1,338	2,154,515
Haute-Rhin	Union fédérale	Clermont-Ferrand.	88	1,878	1,046,085
Rhône	Caisse départementale.	Tarbes.	18	1,011	3,047,759
Rhône	Do	Belfort.	18	386	613,245
Rhône	Caisse régionale du Sud-Est.	Lyon.	20	562	597,660
Haute-Saône	Union de réassurance.	Lyon.	60	683	1,301,015
Haute-Saône	Caisse départementale de réassurance	Gray.	101	1,272	2,516,433
Saône-et-Loire	Do	Vesoul.	103	2,103	4,742,360
Sarthe	Fédération des sociétés de secours.	Mâcon.	45	2,028	8,700,300
Savoie	Do	Le Mans.	33	2,754	5,809,783
Savoie (Haute-)	Caisse départementale de réassurance	Chambéry.	90	1,100	1,874,810
Savoie	Union fédérale des associations cantonales de France.	Annemasse.	—	4,004	8,327,605
Seine-Inférieure	Union de réassurance de l'arrondissement	Paris.	10	198	1,400,800
Seine-Inférieure	Union de réassurance de l'arrondissement (chevaux)	Dieppe.	21	507	604,984
Seine-Inférieure	Union de réassurance de l'arrondissement (bovins)	Rouen.	17	751	1,004,322
Seine-Inférieure	Do	Rouen.	8	207	1,806,192
Seine-Inférieure	Union de réassurance de l'arrondissement (chevaux)	Yvetot.	7	337	964,315
Seine-Inférieure	Union de réassurance de l'arrondissement (bovins)	Le Havre.	7	241	1,355,456
Seine-Inférieure	Idem	Neufchâtel.	15	372	1,278,660
Seine-Inférieure	Caisse départementale de réassurance	Niort.	185	539	2,456,517
Seine-Inférieure	Do	Antenna.	18	5,273	8,618,190
Seine-Inférieure	Fédération varoise	Draguignan.	18	430	611,860
Seine-Inférieure	Union vendéenne	La Roche-sur-Yon.	9	845	2,011,574
Vendée	Fédération des sociétés locales.	Imoges.	25	1,581	3,866,000
Vosges	Caisse départementale.	Epinal.	127	5,100	6,996,124
Yonne	Union des sociétés mutuelles	Auxerre.	106	5,604	6,957,693
	<i>Total</i>	75 societies	2,887	83,612	183,414,346

§ 3. MUTUAL FIRE INSURANCE SOCIETIES.

Mutual fire insurance societies come in order of importance immediately, after those for live stock insurance. In these societies the members may be divided into two categories. There are first the *effective* members, *actually* insuring capital. Next, a large number of agriculturists, connected with insurance societies, belong nevertheless to mutual societies as *expectant* members, awaiting the expiration of their policies, and stating the amount of capital which they will then have to *insure*. These distinctions appear in the following table, which shows the progress of the subsidized mutual agricultural fire insurance societies.

TABLE VI. — *Progress of Subsidized
Mutual Agricultural Fire insurance Societies.*

On 31 December	Number of societies	Number of members		Value of capital	
			effective and expectant		insured and to be insured
				francs	francs
1902	5	—	534	—	3,652,116
1903	27	—	2,674	—	20,181,502
1904	111	—	5,930	—	42,403,730
1905	273	—	12,437	—	101,972,610
1906	740	—	28,091	—	239,137,850
		effective	expectant	insured	to be insured
1907	1,208	29,218	19,795	254,755,365	243,496,815
1908	1,598	44,935	27,014	261,788,621	330,998,098
1909	1,901	49,551	30,785	476,886,664	443,636,295
1910	2,228	63,826	35,580	643,576,830	466,816,825
1911	2,662	68,900	43,840	693,487,705	591,012,650
1912	3,387	92,035	43,451	1,050,457,801	562,819,991
1913	3,834	96,872	50,179	1,100,753,206	645,631,631
1914	4,012	99,266	53,848	1,125,175,000	696,833,441
1915	4,039	99,495	54,214	1,127,594,125	701,462,573
1916	4,054	99,726	54,420	1,130,349,136	705,008,900
1917	4,066	99,841	54,534	1,131,574,431	706,282,365
1918	4,084	100,067	54,698	1,135,575,582	709,597,174
1919	4,123	100,341	54,800	1,136,442,239	711,618,82

Nineteen departments are without a mutual fire insurance company. On the other hand, there are 432 in Haute-Marne, 240 in Deux-Sèvres, 227 in Basses-Pyrénées, 198 in Drôme, 181 in Isère, 177 in Aube, 156 in Haute-Saône, 150 in the Vosges.

Table VII shows the position of the various departments in this respect.

TABLE VII. — Statistics as at 31 December 1919
of Subsidized Mutual Agricultural Fire Insurance Societies.

Departments	Number of societies	Number of members		Capital insured	
		effective	expectant	effective	expectant
				francs	francs
Ain	83	8,136	2,414	89,050,727	9,050,727
Aisne	55	1,127	526	10,968,795	7,257,840
Allier	21	103	230	1,092,200	3,476,050
Alpes (Basses-)	19	446	112	3,873,830	1,411,610
Alpes (Hautes-)	47	942	512	4,339,580	209,500
Alpes-Maritimes	—	—	—	—	—
Ardèche	101	3,016	1,321	23,198,280	13,605,355
Ardennes	—	—	—	—	—
Ariège	6	153	3	524,450	6,500
Aube	177	3,211	1,737	31,710,021	28,839,264
Aude	49	1,735	1,027	36,504,731	27,784,690
Aveyron	140	2,316	2,494	24,117,385	36,403,020
Bouches-du-Rhône	29	792	268	9,928,465	3,597,165
Calvados	2	9	36	463,310	1,836,950
Cantal	12	271	180	3,281,910	1,833,233
Charente	—	—	—	—	—
Charente-Inférieure	19	645	433	9,360,980	7,147,193
Cher	—	—	—	—	—
Corrèze	8	185	82	1,685,530	723,050
Corse	—	—	—	—	—
Côte-d'Or	45	660	536	8,909,990	8,841,610
Côtes-du-Nord	7	167	115	931,800	723,060
Creuse	5	32	52	913,030	853,710
Dordogne	4	56	11	492,000	102,000
Doubs	123	1,255	1,132	12,942,200	14,302,715
Drôme	198	6,256	2,762	78,332,233	35,679,107
Eure	—	—	—	—	—
Eure-et-Loir	—	—	—	—	—
Finistère	40	957	1,222	14,561,073	13,893,779
Gard	61	1,781	1,078	24,194,428	19,530,240
Garonne (Haute-)	18	221	286	2,191,980	5,002,790
Gers	49	322	461	2,386,290	5,702,880
Gironde	76	824	2,402	12,404,190	16,827,351
Hérault	67	1,062	1,422	11,060,185	37,535,725
Ille-et-Vilaine	8	117	76	1,124,850	1,023,750
Indre	—	—	—	—	—
Indre-et-Loire	1	178	12	2,953,010	188,100
Isère	181	7,702	3,790	84,153,300	44,590,350
Jura	100	1,447	2,001	11,934,280	19,184,695
Landes	13	637	230	5,435,845	2,261,950
Loir-et-Cher	—	—	—	—	—
Loire	142	2,036	1,892	24,916,670	16,834,410
Loire (Haute-)	5	422	37	1,344,200	338,000
Loire-Inférieure	13	642	267	6,055,818	2,995,124
Loiret	—	—	—	—	—
Carried forward	1,924	50,761	31,159	587,337,566	389,593,493

TABLE VII (continuation). — Statistics as at 31 December 1919
of Subsidized Mutual Agricultural Fire Insurance Societies.

Departments	Number of societies	Number of members		Capital insured	
		effective	expectant	effective	expectant
				francs	francs
<i>Brought forward . . .</i>	1,924	50,761	31,159	587,337,566	389,593,493
Lot.	14	155	182	1,202,770	2,000,800
Lot-et-Garonne.	12	153	177	1,637,500	2,076,500
Lozère	39	365	105	2,508,396	961,100
Maine-et-Loire	3	37	30	758,000	377,275
Manche	—	—	—	—	—
Marne	—	—	—	—	—
Marne (Haute-)	432	7,031	3,377	79,101,064	39,733,168
Mayenne	3	51	23	725,175	1,386,750
Meurthe-et-Moselle	59	896	1,034	9,107,200	14,913,330
Meuse	—	—	—	—	—
Morbihan	9	497	80	3,385,222	410,000
Nièvre	5	150	175	1,570,450	199,500
Nord	9	148	81	2,455,110	1,030,400
Oise	—	—	—	—	—
Orne	2	35	21	568,700	250,000
Pas-de-Calais	116	933	1,100	9,933,309	18,238,350
Puy-de-Dôme	21	995	311	5,864,071	3,904,400
Pyrénées (Basses-)	227	3,757	2,783	32,481,428	33,954,025
Pyrénées (Haute-)	65	637	606	5,143,160	6,342,095
Pyrénées-Orientales	56	1,013	1,062	14,017,395	20,882,230
Haut-Rhin	25	404	158	5,962,000	2,482,430
Rhône	114	3,256	1,910	115,102,946	28,402,156
Saône (Hautes)	156	1,710	1,432	17,426,425	15,688,327
Saône-et-Loire	43	1,098	812	12,448,300	13,007,410
Sarthe	—	—	—	—	—
Savoie	93	3,652	664	24,972,040	6,763,632
Savoie (Haute-)	108	8,015	1,135	42,681,671	12,728,390
Seine	—	—	—	—	—
Seine-Inférieure	—	—	—	—	—
Seine-et-Marne	4	103	71	438,650	1,453,250
Seine-et-Oise	1	3	24	40,000	779,800
Sèvres (Deux-)	240	4,981	2,598	79,503,294	44,560,428
Somme	—	—	—	—	—
Tarn	35	168	473	2,292,420	8,593,570
Tarn-et-Garonne	—	—	—	—	—
Var	21	455	144	4,959,720	1,999,600
Vaucluse	101	3,895	731	39,985,860	9,501,740
Vendée	4	242	87	2,014,000	1,009,000
Vienne	9	1,374	136	4,877,270	1,653,445
Vienne (Haute-)	18	373	310	4,628,980	4,312,850
Vosges	150	5,733	1,708	21,160,247	21,119,333
Yonne	5	65	101	671,900	1,510,050
<i>Totals . . .</i>	4,123	100,341	54,800	1,136,442,239	711,818,827

Re-insurance is carried on by 35 departmental or regional societies, which comprise 3,695 affiliated societies. Nearly all the re-insurance societies are themselves re-insured in one of the two central societies. One of these central banks is subsidized; the National Society for the Re-insurance of Agricultural Mutual Fire Insurance Societies, 18 Rue de Grenelle, Paris. This Society re-insures 18 regional or departmental re-insurance societies, with a total number of 39,120 effective members, and an effective re-insured capital amounting to 142,960,983 francs. The other central society, which is not subsidized, is the Central Society of Agricultural Mutual Insurance Societies, 8 Rue d'Athènes, Paris, which re-insures 15 regional societies, comprising 2,910 local societies, with a total number of 88,924 members and an effective re-insured capital of 209,907,250 francs. Table VIII (p. 878) shows the importance of the various departmental or regional societies for re-insurance against agricultural fire risks.

§ 4. MUTUAL HAIL INSURANCE SOCIETIES.

Mutual insurance against hail is by no means so widely developed as mutual insurance against mortality in cattle, and against fire. Table IX shows how far it has progressed.

TABLE IX. — *Progress of Subsidized Mutual Hail Insurance Societies.*

Years	Number of societies	Number of members	Capital insured (crores)
1898 .		16,812	8,499,456
1899 .	14	17,067	9,552,468
1900 .	16	28,760	13,841,656
1901 .	16	29,340	13,964,459
1902 .	19	29,604	14,785,435
1903 .	21	32,050	18,380,715
1904 .	22	33,023	18,640,520
1905 .		33,963	19,299,800
1906 .	24	38,550	20,479,815
1907 .	24	40,500	21,500,000
1908 .	24	42,065	22,530,580
1909 .	24	47,737	27,084,970
1910 .	25	44,677	28,159,854
1911 .	27	38,014	30,890,450
1912 .	28	38,914	31,024,450
1913 .	28	38,914	30,524,480
1914 .	28	37,940	29,535,750
1915 .	28	37,780	31,524,892
1916 .	28	37,780	31,524,892
1917 .	28	37,780	31,524,892
1918 .	28	37,780	31,524,892
1919 .	28	37,780	31,524,892

TABLE VIII. — *Position on 31 December 1919 of Departmental or Regional Societies for Re-insurance against Agricultural Fire Risks.*

Departments	Names of societies	Headquarters	Number of affiliated societies	Number of members	Amount of capital reinsured by effective members	Amount of capital to be re-insured by expectant members
				effective	expectant	frances
Aln.	Régionale de l'Aln et du Haut-Rhône.	Nantua	19	769	—	—
Ain.	Caisse de la Champagne et de la Brie.	Château-Thierry	65	1,298	590	7,446,560
Allier.	Caisse départementale de réassurance.	Moulins	16	216	—	10,787,205
Ardeche.	Caisse départementale de réassurance.	P-Vias	13	282	72	539,246
Aube.	Caisse départementale de réassurance.	Troyes	190	4,185	132	388,514
Avignon.	Régionale incendie.	Rodes	75	3,042	640	61,279,159
Aveyron.	Caisse régionale du Plateau central.	Rodes	90	530	620	24,000,000
Dordogne.	Caisse du Périgord et du Limousin.	Périgueux	90	530	620	49,444,900
Drome.	Mutuelle régionale agricole.	Montélimar	143	6,137	800	769,800
Finistère.	Caisse régionale de la Bretagne.	Landernau	143	6,137	800	70,116,520
Garonne (Haute-).	Mutuelle agricole incendie.	Toulouse	64	1,421	2,515	11,026,570
Gers.	Mutuelle agricole incendie de Gascogne.	Lombes	15	311	137	1,271,160
Hérault.	Caisse régionale du Sud-Est.	Bordeaux	44	448	175	4,423,310
Héroult.	Caisse régionale du Midi.	Montpellier	83	2,408	1,240	23,930,385
Ille.	Caisse départementale de réassurance.	Long-le-Saunier	117	10,178	1,114	18,832,790
Loire.	Mutuelle agricole incendie.	Saint-Etienne	52	292	813	7,973,940
Loire (Haute-).	Mutuelle agricole incendie.	Chautmont	64	1,088	600	12,449,455
Marne (Haute-).	Caisse régionale du Maine et de l'Anjou.	Caen	88	25,113	—	25,239,000
Mayenne.	Caisse départementale.	Arras	10	93	590	7,459,515
Meurthe-et-Moselle.	Caisse départementale.	Clermont-Ferrand	61	553	568	7,590,000
Pyrenees (Basses-).	Fédération des mutuelles agricoles.	Fau	14	550	150	4,595,110
Pyrenees (Basses-).	Union des Pyrénées et des Landes.	Tarbes	184	14,468	1,200	44,396,266
Pyrenees (Basses-).	Union fédérale.	Pérpignan	112	1,087	—	10,330,300
Pyrenees (Basses-).	Caisse régionale.	Pau	17	166	17	1,300,043
Pyrenees-Orientales.	Caisse départementale.	Belfort	70	2,943	728	30,378,655
Rhin (Haut-).	Caisse régionale.	Lyon	45	430	333	4,598,900
Rhône.	Caisse régionale.	Lyon	66	5,010	650	43,000,000
Rhône.	Caisse du Sud-Est.	Gray	538	22,940	—	320,888,765
Saône (Haute-).	Caisse régionale de Bourgogne et de Franche-Comté.	Gray	272	12,404	1,140	19,859,515
Savoie (Haute-).	Mutuelle agricole incendie de l'Ouest.	Niort	137	2,070	2,574	28,042,510
Seine-et-Marne.	Caisse régionale agricole.	Albi	27	119	—	3,582,970
Seine-et-Marne.	Caisse régionale des Alpes et de Provence.	Avignon	206	5,325	3,100	41,948,920
Seine-et-Marne.	Caisse régionale du Centre-Ouest.	Poitiers	12	322	217	4,962,365
Yonne (Haute-).	Caisse régionale Innouaine.	Châteausaunac	8	252	9	41,613,390
Yonne (Haute-).	Caisse départementale.	Limoges	8	163	173	1,766,770
Yonne (Haute-).	Caisse départementale.	Limoges	8	163	173	2,277,950
Total			3,695	128,433	21,645	1,233,423,809
						561,505,435

The 28 societies working on 31 December 1919 are thus divided:

TABLE X. — *Subsidized Mutual Hail Insurance Societies*
on 31 December 1919.

Departments	Number of societies	Number of members	Approximate value of crops insured
			francs
Ain (two districts)	1	794	1,605,570
Alpes-Maritimes (communal)	1	105	180,000
Ardennes (departmental)	1	232	970,000
Ariège (cantonal)	1	65	45,000
Aube (departmental)	1	400	962,000
Corrèze (tobacco planters)	1	—	83,455
Côte-d'Or (cantonal)	1	131	91,580
Creuse (departmental)	1	973	1,040,186
Dordogne (tobacco planters)	1	10,360	1,260,000
Gironde (tobacco planters)	1	4,426	3,320,000
Landes (1 communal, tobacco planter)	2	271	172,872
Lot-et-Garonne (tobacco planters)	1	6,036	4,249,180
Marne (departmental)	1	5,700	3,500,000
Marne (Haute) (departmental)	1	382	244,795
Meurthe-et-Moselle (tobacco planters)	1	600	208,500
Meuse (departmental)	1	2,883	3,045,145
Nord (tobacco planters)	1	455	1,154,752
Pyrénées (Hautes) (tobacco planters)	1	354	115,000
Saône (Haute) (tobacco planters)	1	1,339	431,102
Deux-Sèvres (district society)	1	190	348,253
Somme (departmental)	1	1,743	3,378,580
Vienne (Haute-) (communal)	2	105	704,832
Vienne (Haute-) (cantonal)	1	29	24,340
Vosges (district)	1	92	160,000
Yonne (cantonal)	1	15	140,000
Seine (the district of Paris)	1	100	1,079,150
Totals . . .	28	37,780	315,24,892

As may be seen mutual hail insurance societies have in general a wide sphere of action; most of them extend over a whole department, notably in the case of the societies of tobacco planters, which are nine in number, and insure crops the total value of which is approximately 14 million francs.

§ 5. SOCIETIES FOR MUTUAL INSURANCE
AGAINST ACCIDENTS IN AGRICULTURAL LABOUR.

It remains for us to speak of societies for mutual insurance against accidents in agricultural labour. These societies at present number 66, of which 65 are local societies, with 6,790 members, and one is a regional re-insurance society, the *Mutuelle agricole tourangelle* at Tours. This subsidized re-insurance society has been working satisfactorily since 1910. Its reserve fund now amounts to about 165,000 francs, and it is in a great measure owing to the activity of its directors that the 60 local societies in Indre-et-Loire and Maine-et-Loire, affiliated to it, were founded. Mutual societies for insurance against accidents in agricultural labour confine themselves to insuring agriculturists against civil liability (Art. 1,382 *et seq.* of the Civil Code) but their field of action will be largely increased should Parliament vote the law which extends to agriculture the principles laid down by the Law of 9 April 1898 on the subject of accidents in labour. The bill adopted on this question by the Chamber of Deputies on 18 May 1915 is now awaiting the decision of the Senate. Should it be definitely passed, the societies for mutual insurance against accidents in agricultural labour will be obliged to develop rapidly, for on them will especially rest the organization of this kind of insurance. Meantime, the position of these societies is shown in Table XI.

TABLE XI. — *Subsidiary Societies for Mutual Insurance against Accidents in Agricultural Labour on 31 December 1919.*

Department	Name of society	Headquarters	Sphere of action	Number of members	Number of persons insured
Ain	La Bressane, Société d'assurances mutuelles contre les accidents.	Bâgé-le-Châtel.	The canton and the environs	1,964	5,450
		Marlieux.	The commune	278	1,055
		Vinay.	The commune	167	682
		Maintenon.	The region	44	135
		Châteauneuf.	The département	109	75
	Société d'assurance mutuelle contre les accidents agricoles de l'Association syndicale des agriculteurs et des viticulteurs de l'Indre.	Anbillon.	The commune	14	50
		Artannes.	"	32	120
		Athée.	"	12	50
		Auzouer.	"	16	60
		Benais.	"	44	175
Eure-et-Loire	Société d'assurance mutuelle contre les accidents agricoles de l'Association syndicale des agriculteurs et des viticulteurs de l'Indre.	Le Boulay.	"	15	60
		Bréclmont.	"	59	235
		Brizay.	"	12	50
		Cheillé.	"	69	250
		Chemillé-s.-Dême.	"	25	100
		Chemillé-s.-Indrois.	"	22	80
		Cleré.	"	33	130
		Cravant.	"	40	160
		Dierre.	"	45	180
		Evreux.	"	47	190
Indre-et-Loire	Société d'assurance mutuelle contre les accidents agricoles.	Evreux.	"	51	200
		Evreux.	"	30	220
		Evreux.	"	10	40
		Evreux.	"	12	50
		Evreux.	"	47	180
		Evreux.	"	21	80
		Evreux.	"	30	120
		Evreux.	"	32	120
		Evreux.	"	44	175
		Evreux.	"	21	80
Indre-et-Loire	Société d'assurance mutuelle contre les accidents agricoles.	Marilly-sur-Maunhe.	"	18	75
		Montlouis.	"	37	140
		Montlouis.	"	22	80
		Montlouis.	"	22	80
		Montlouis.	"	22	80
		Montlouis.	"	22	80
		Montlouis.	"	22	80
		Montlouis.	"	22	80
		Montlouis.	"	22	80
		Montlouis.	"	22	80

TABLE XI (continuation). — *Subsidized Societies for Mutual Insurance against Accidents in Agricultural Labour on 31 December 1919.*

Department	Name of Society	Headquarters	Sphere of action	Number of members	Number of persons insured
Indre-et-Loire . . .	Société d'assurance mutuelle contre les accidents agricoles	Nemillé Pont-Pierre	The commune	28	115
		Nolsey	"	67	230
		Notre-Dame-D'Oé	"	21	86
		Orbigny	"	17	70
		Pernay	"	42	170
		Pocé	"	38	160
		Rigny-Usé	"	47	190
		Rivrennes	"	36	135
		Saint-Branches	"	28	110
		Saint-Cyr-sur-Loire	"	48	200
		Saut-Denis-Hors	"	55	220
		Saint-Genouph	"	29	120
		Saint-Hippolyte	"	9	66
		Saint-Laurent-en-Gâtines	"	29	120
		Saint-Nicolas-de-Bourgueil	"	43	170
Maine-et-Loire . . . Sarthe Deux-Sèvres	La Sarthoise Société d'assurances mutuelles contre les accidents agricoles Mutuelle agricole du Poitou	Saint-Pierre-des-Corps	"	16	60
		Savigné-sur-Lathan	"	21	80
		Savonnières	"	32	125
		Semblançay	"	6	20
		Semilly	"	20	80
		Sonzay	"	31	180
		Souvigné	"	22	85
		Vallères	"	34	135
		Veigné	"	16	60
		Villedoin	"	9	35
		Villiers-au-Bois	"	33	140
		Broc	"	14	136
		Le Mans	The department	3,220	13,100
		Ardin	The commune and environs	106	300
		Melle	The district	—	231
Niort	Several departments	(115 sections)	4,554		
Totals				6,790	33,144

Part III: Credit

MISCELLANEOUS INFORMATION ON CREDIT IN VARIOUS COUNTRIES

BULGARIA.

THE SITUATION OF THE AGRICULTURAL BANK OF BULGARIA. — *L'Écho de Bulgarie*, 7 September 1920.

M. Nicolas Stoïanoff, Director of the Public Debt, made on 9 July last before the committee of French holders of Bulgarian bonds at Paris the following statements :

The Agricultural Bank, called upon to meet the requirements of agricultural credit, is developing very well and being of great use to the Bulgarian country population. Next to the National Bank it occupies the second place in the country as an instrument of national credit. On 31 December 1919 its capital amounted to 63,748,000 levas, the reserve fund was 19,918,000 levas, and the deposits were 263,000,000 levas.

In 1896 the Bulgarian Government contracted, on behalf of the Bank, a debt intended exclusively to increase the funds of the agricultural banks. The Bulgarian State and the Agricultural Bank of Bulgaria are jointly liable for this debt. According to article 4 of the contract, the payment of the coupons and the bonds drawn by lot is guaranteed: (1) by the general revenues of Bulgaria and (2) by the funds and revenues of the agricultural banks. Up to now the payment of the coupons of this loan have always been, and are still made out of the revenues of the Agricultural Bank through the Public Debt Department. Up to Bulgaria's entry into the war in October 1915 the coupons were paid very regularly. During the war drawings took place on the dates fixed by the contract, and the half-yearly interest was paid in Bulgarian levas by the Agricultural Bank to the Public Debt Department, and this is still being done. The transmission of these payments could not be made before the armistice because of the war, and since the armistice because of the fall in value of the Bulgarian lev. Taking into consideration that the exchange is still extremely unfavourable to the lev, the Agricultural Bank of Bulgaria has been obliged to ask foreign bond-holders of its loan to consent to adjourning the payment of the coupons already due until such time as the exchange on Bulgarian money shall have somewhat improved, on the security of the sums already paid in Bulgarian levas. The net profit of the

Agricultural Bank of Bulgaria amounted for the year 1918 to 6,360,000 levas, and for 1919 to 8,110,000 levas. The average annual charge, in principal and interest, on the Bank's loan amounts to 1,637,000 francs.

CANADA.

1. INQUIRY INTO RURAL CREDIT SYSTEMS. — *Agricultural Gazette of Canada*, Vol. 7, No. 8, Ottawa, August 1920.

The Minister of Agriculture for Ontario has appointed a committee to inquire into the subject of rural credit systems. In making the appointment, the Minister pointed out that conditions in Ontario differ from the conditions in the Western Provinces, where rural credit plans have been carried out. The Committee will be expected to inquire into the different methods adopted both in Canada and in the United States. This having been done, it is proposed to arrange meetings with farmers in various parts of Ontario in order to ascertain their requirements as nearly as possible. The inquiry will include both short-term credits and long-term credits, and the Committee will endeavour to work out a system which will provide the necessary facilities for sound agricultural development, taking into account the banking system and other financial arrangements of the province which may be affected.



2. MARKETING LOANS IN ONTARIO. — *Agricultural Gazette of Canada*, Vol. 7, No. 8, Ottawa, August 1920.

In the last session of the Ontario Legislature an important measure was passed with the object of granting financial assistance to organizations of producers incorporated under the Companies Act who desire to construct and operate seed centres or potato warehouses. A loan up to fifty per cent. of the value of the land, building and equipment may be made, provided that such loan does not exceed the sum of \$3,000 in each case. This loan is free of interest for a period of two years, but fifty per cent. of it must be repaid in five years and the balance at the end of a further period of five years. The act provides the usual machinery for the safeguarding of the investment.

This measure was introduced in response to an indication that there is a real need in Ontario for encouraging the development of local seed centres where modern equipment for cleaning seed grain can be established and in this way a market secured for the good seed produced in many sections. Similarly there are indications that several sections would like to erect potato warehouses in order to carry their product for a longer period, instead of forcing it all on the market in a short time, thereby placing the stock under the control of the dealer and speculator.

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3 LOANS FOR THE PURCHASE OF SEED GRAIN IN MANITOBA AND ALBERTA
— *Agricultural Gazette of Canada*, Vol 7, No 8 Ottawa, August 1920.

The Seed Grain Act, passed at the last session of the Manitoba Legislature, enables municipalities to borrow limited amounts of money for the purchase of seed grain. It is virtually a re-enactment of the act passed last year and in previous years. It provides that municipalities may borrow such sums as may be required, but not exceeding \$60,000, for the purpose of furnishing grain for farmers who served, or volunteered, or were called upon to serve in the late War. After by-laws have been adopted authorizing the borrowing by the council of the municipality, debentures issued under the provisions of the act may be for any term not exceeding five years, at interest not exceeding seven per cent. per annum, to be repayable in equal consecutive annual instalments. All moneys lent or borrowed under the act are to form a fund separate and distinct from other funds of the locality. The purchase and distribution of the seed are to be made by the municipality.

The Legislature of Alberta has also voted a Seed Grain Act. It is similar to the Seed Grain Act of 1919. The amount to be advanced is not to exceed \$300 for each quarter section in any one year, nor to exceed \$850 against any quarter section including advances for seed and feed under any Seed Grain Act of previous years. No provision is made for advances for feed in the 1920 Act.

HOLLAND.

THE PRESENT POSITION OF AGRICULTURAL CREDIT — *VERSLAGEN EN MEDEDELINGEN VAN DEN LANDBOUW* (*Reports and Communications of the Department of Agriculture*) 1920, No 3 The Hague, 1920 — *Nederlandsch Landbouwwerkblad* (*Dutch Agricultural Weekly*), Year XXIX, Nos 48 and 49 Schiedam, 27 November and 4 December 1920.

The conclusion of peace, which opened the Dutch frontiers to importation, and the somewhat favourable exchange caused a very large quantity of goods to flow into the national ports and particularly food-stuffs which, in Holland as in all other countries, had been comparatively scarce during the War.

The amount of the imports changed the situation of the farmers in relation to the Government, which still regulates all supplies. The returns could not remain at the same level and the effect of this was felt by the rural banks.

To meet the ever more threatening foreign competition the peasants have need of capital. The danger of war having ceased, though the uncertainty of the after-War still continued, they had in great part deposited their gains in the banks. Now they are withdrawing them with the object of improving their holdings.

This is the explanation given by the Minister to some members of parliament who, made anxious by the fact that so much money was being withdrawn, thought it indispensable to persuade the Dutch Bank to grant special facilities to the rural credit banks.

In the latest statistics published only the beginning of the crisis is apparent, yet even in these the change of the financial situation is evident.

The number of local credit institutions affiliated to the three central banks is shown in Table I.

TABLE I. — *Local Credit Societies affiliated to the Central Banks.*

Central Banks	on 31 December 1918	on 31 December 1919
Coöperatieve Centrale Raiffeisenbank te Utrecht (<i>Central Co-operative Raiffeisen Bank, Utrecht</i>).	622	632
Coöperatieve Centrale Boerenleenbank te Eindhoven (<i>Central Co-operative Rural Credit Bank, Eindhoven</i>).	436	469
Coöperatieve Centrale Land- en Tuinbouwbank te Alkmaar (<i>Central Co-operative Bank for Farmers and Market Gardeners, Alkmaar</i>).	45	45

The deposits and loans granted are shown in Table II.

TABLE II. — *Financial Position of the Central Agricultural Credit Banks.*

	Deposits		Loans granted	
	1918	1919	1918	1919
	florins	florins	florins	florins
Utrecht . . .	62,576,975.07	43,935,329.30	873,583.20	9,905,169.15
Eindhoven . .	52,002,832.64	53,533,864.67	450,850.30	1,660,446.55
Alkmaar . . .	2,974,674.62	1,810,582.35	208,594.04	714,976.72

The Rural Mortgage Credit Bank (*Boeren-Hypothenbank*), with headquarters at Eindhoven had outstanding on 31 December 1919 300 loans amounting to 2,141,988.93 florins, while on 31 December 1918 the corresponding figures were 265 and 1,649,926.46 florins. Of the results of the Dutch Rural Bank (*Nederlandsche Landbouwbank*) with headquarters at Amsterdam it is not yet possible to judge, as it was only formed in February 1919.

A summary of the operations of the three principal banks is contained in the following tables :

TABLE III. — *Assets of the Central Agricultural Credit Banks.*

Central Bank	Number		Savings Deposits				
	Banks	Members	Number of saving bank pass books	Deposit in hand on 31 Dec. 1917	Lodged	Withdrawn	Deposits in bank on 31 Dec. 1918
				florins	florins	florins	florins
Utrecht . . .	621	68,471	120,490	84,143,433.03	80,658,042.89	57,657,258.34	107,744,419.58
Eindhoven . .	436	51,101	80,335	55,357,327.41	50,230,739.70	28,444,596.31	77,143,470.79
				31 Dec. 1918			31 Dec. 1919
Alkmaar . . .	45	4,507	9,671	6,004,532.23	7,087,103.86	6,439,764.78	6,880,245.86

TABLE IV. — *Liabilities of the Central Agricultural Credit Banks.*

Central Bank	Loans				
	Number of loan accounts	Loans outstanding on 31 December 1917	Loans granted	Loans repaid	Loans outstanding on 31 December 1918
		florins	florins	florins	florins
Utrecht . . .	25,646	25,644,864.38	20,097,989.47	11,802,727.32	33,945,126.52
Eindhoven . .	17,615	14,251,655.08	5,464,524.33	4,211,367.28	15,504,812.13
		31 December 1918			31 December 1919
Alkmaar . . .	—	2,459,270.24	3,723,581.75	1,767,657.82	3,338,739.17

TABLE V. — *Current Accounts of the Central Agricultural Credit Banks.*

Central Banks	Number of current accounts	Current accounts					
		Position on 31 Dec. 1917		Lodged in 1918	Withdrawn in 1918	Position on 31 Dec. 1918	
		Deposits in hand	Overdrafts			Deposits in hand	Overdrafts
		florins	florins	florins	florins	florins	florins
Utrecht . . .	12,049	15,032,392.11	10,392,239.08	66,323,021.35	68,805,969.23	21,401,908.60	14,178,807.19
Eindhoven . .	2,958	4,839,884.49	1,669,755.28	11,601,328.30	12,290,877.98	6,154,876.51	2,295,197.62
		6 Dec. 1918	31 Dec. 1918	1919	1919	31 Dec. 1919	31 Dec. 1919
Alkmaar . . .	—	1,308,053.47	546,542.50	4,807,460.02	5,458,418.06	1,735,928.21	379,799.97

The statistics of the mortgage banks also show clearly how much the need of the Dutch farmers for money has increased. It is sufficient to compare the figures of 1913 and 1914 with those of 1918 and 1919.

TABLE VI. — *Statistics of Mortgages on Rural Land.*

Provinces	1913	1914	1915	1918	1919 (provisional figures)
	florins	florins	florins	florins	florins
Groningen	4,984,458	6,619,725	3,416,640	8,765,102	13,458,972
Friesland	4,544,956	4,283,789	3,598,788	7,525,176	12,054,492
Drenthe	2,947,190	4,262,496	1,752,389	4,687,404	5,278,670
Overijssel	2,468,351	2,333,597	2,062,264	3,983,212	4,903,776
Guelders	8,219,300	8,015,794	7,133,584	14,422,942	19,666,877
Utrecht	3,497,543	2,775,473	1,890,835	6,108,797	7,251,820
North Holland	10,841,290	8,423,727	6,138,812	21,582,027	11,581,781
South Holland	15,456,262	11,801,056	8,158,064	25,039,177	32,035,244
Zealand	3,722,600	3,294,928	2,334,263	7,646,295	10,224,146
Brabant	3,446,679	7,148,088	2,190,272	5,026,876	7,991,329
Limburg	1,953,732	1,523,775	1,413,783	4,789,999	5,499,160
Holland	62,076,361	58,482,448	40,089,694	109,577,007	139,946,267

ITALY.

AGRICULTURAL CREDIT GIVEN BY THE SAVINGS BANK OF THE BANK OF NAPLES IN 1919. — BANCO DI NAPOLI, CASSA DI RISPARMIO, CREDITO AGRARIO. RILEVAZIONE SULL'ESERCIZIO 1919. Rome 1920.

The need which was strongly felt of intensifying as much as possible the cultivation of cereals (1) last year also induced the Government, in order to facilitate the attainment of this object, to advance large sums to be distributed amongst the farmers through the medium of the special credit institutions. Thus the Savings Bank of the Bank of Naples, which is the largest of these institutions, again in 1919 drew from three sources the means necessary for giving agricultural credit :

- (1) Its own deposits, in terms of the Law of 7 July 1901, No. 334 ;
- (2) The funds of the provincial agricultural credit banks managed by it, in terms of the Law of 2 February 1911, No. 70 ;
- (3) Funds advanced directly by the State, as an exceptional measure.

(1) Special provisions for increasing the cultivation of cereals were contained in the Decree Laws of 15 September 1918, No. 1444, of 13 April 1919, No. 600, of 22 June 1919, No. 1190, and of 20 July 1914, No. 1414, and in the Ministerial Decrees of 6 October 1918 and of 12 and 25 September 1919.

As is well known, both the Law of 7 July 1901, No. 334, which authorized the Savings Bank of the Bank of Naples to grant agricultural credit in the Southern Provinces of the Kingdom and in the Island of Sardinia, and the Law of 2 February 1911, No. 70, which entrusted to it the management of the provincial agricultural credit banks in eleven provinces of the Mainland in the South of Italy, lay down the fundamental principle that credit must not be given to farmers for agricultural needs directly by the Savings Bank, but through the medium of smaller local institutions, preferably co-operative in form, which are known as "intermediate bodies" and that only in the absence of such bodies or when the existing bodies are inactive or do not inspire confidence that they can carry out this function, can the Savings Bank grant direct loans to farmers.

The institutions capable of acting as "intermediate bodies," which at the end of the first working year (1902) numbered 162, and at the end of the first decade numbered 707, reached the number of 1,243 at the end of 1919. They may be thus classified: Agricultural and rural banks, 522; *Monti frumentari*, 296 (of which 288 were in Sardinia); popular banks, 139; agricultural consortia, 130; agricultural loan banks, 1919; savings banks, 15; agricultural credit societies, 9; mutual aid societies, 7; autonomous agricultural credit banks, 6.

The institutions inscribed in the *castelletto agricolo*, that is to which credit had been given by the Bank, numbered 730 on 31 December 1919, the total credits being 31,269,600 liras. Of these only 196 availed themselves of the credits opened in their favour.

The credit operations are divided into two classes — "ordinary" and "special." The former are carried on with the deposits of the Savings Bank and with the capital of the provincial banks; the latter with the funds advanced by the State for increasing the cultivation of food stuffs.

The ordinary operations in 1919 amounted to 12,784,402 liras and may be thus classified: (a) re-discounts to the intermediate bodies, 7,533 in number, for a total amount of 4,968,378 liras; (b) direct loans to farmers, 38 in number, amounting to 134,234 liras; (c) direct discounts to the intermediate bodies, 418 in number, for a total amount of 7,681,789 liras. Of the loans of the first two classes, more than 2 million liras were granted for cultivation; about 1 million liras for spraying materials; more than 1 million liras for cattle and the remainder of the sum for harvesting expenses, for fertilizers, machines, seeds, etc. About 4 million liras were advanced to freeholders, rather more than one million liras to rent-paying tenants, and the remainder to produce sharing tenants and tenants in emphyteusis. Of the loans of the first class, loans amounting to rather more than 4 million liras were made by agricultural consortia and agricultural and rural banks; the remainder by various other bodies.

Of the loans of the third class, loans amounting to rather more than 5 million liras were made for collective purchases, loans amounting to 1,600,000 for collective sales and the remainder to make up the deficiencies in the means of which the intermediate bodies themselves disposed. In

the case of these loans, as in that of loans of the first class, the most active intermediate bodies were the agricultural consortia and the rural banks.

During the past year the rate of interest remained unchanged at 3 $\frac{1}{2}$ per cent. on the operations carried out through the local institutions (re-discounts and direct discounts) and at 4 per cent. on loans made directly to farmers; the intermediate bodies, in their turn, charged interest on loans varying from 3 $\frac{1}{2}$ to 6 per cent., but usually 5 or 5 $\frac{1}{2}$ per cent.

The special agricultural credit operations began in 1916 for the agricultural year 1916-17, in the provinces of Foggia, Bari and Campobasso, where much damage had been done by moles. In these provinces loans to the amount of 21,500,000 liras were made, including 16 million liras in Foggia, 4,400,000 liras in Bari and rather more than 1 million liras in Campobasso.

In the following year, 1917-18, loans were granted to the amount of 34,500,000 liras, including 28 million liras in the province of Foggia, 3,700,000 liras in the province of Bari, 2,300,000 liras in the province of Campobasso, and the rest in the provinces of Lecce, Avellino, Caserta, Benevento, Salerno and Aquila.

In the year 1918-19 loans were made to the amount of 31,400,000 liras, including 26,200,000 liras in Foggia, 2,100,000 in Campobasso, 1,300,000 in Bari, etc.

Lastly, in the agricultural year 1919-20 a wider extension was given to the loans than in the preceding years, as they could be granted not only for the cultivation of food stuffs (cereals, vegetables, potatoes, etc.) but for the cultivation of other crops as well as for the purchase of machines and implements and for the utilization and transformation of products. Up to 31 December 1919, the amount of loans granted was as follows: For the cultivation of food stuffs, 29,822,011 liras; for the purchase of live stock, 294,500 liras; for the purchase of machines, 260,446 liras; in all, 30,376,957 liras. Of these, loans amounting to 24,300,000 liras were granted in the province of Foggia alone. To freeholders 18 million liras were advanced; to rent-paying tenants, 12,200,000 liras, and the remainder to tenants in emphyteusis and produce-sharing tenants.

In conclusion, the Savings Bank of the Bank of Naples in 1919 carried out ordinary agricultural credit operations to the amount of 12,784,402 liras, thus bringing up to 140,268,834 liras the total credit which it has granted in accordance with the terms of the Laws of 7 July 1901 and 2 February 1911, and special agricultural credit operations to the amount of 49,086,827 liras, which brings up to 117,930,478 liras the total amount of the loans made out of State funds in the four years since this special form of credit was first granted.

Part IV: Agricultural Economy in General

SWITZERLAND.

THE EFFORTS TO ARREST RURAL DEPOPULATION.

SOURCES :

MÉMOIRES PROPRES À LUTTER CONTRE LA DÉPOPULATION DES COMMUNES MONTAGNARDES ET RURALES. Rapport présenté au Département fédéral de l'Économie publique par le Secrétariat des paysans suisses. Brugg, 1919

BERNHARD (Hans): La colonisation intérieure en Suisse. *Zeitschrift für Schweizerische Statistik*, Year 1918, No. 4. Berne.

In our issue of August 1920 we have shown the extent of rural depopulation in Switzerland and have noted the fact that the diminution in the agricultural population (that is, in the persons living directly by agriculture) occurs almost exclusively in the classes of persons who help in the work of the farm, but do not belong to the family — the farm-servants and day labourers -- Swiss agriculture having lost between 1888 and 1910 more than one fifth of its wage earners (pages 571 to 579). We have now to indicate the causes of this phenomenon and the remedies proposed.

§ 1. CAUSES WHY THE AGRICULTURAL LABOURERS LEAVE THE COUNTRY DISTRICTS.

The reasons why the agricultural labourers leave the country districts are very varied and may be grouped under five principal heads:

(1) *Wages.* -- Although they have rapidly increased in the last few years, agricultural wages remain appreciably lower than those paid in other occupations. An inquiry made in 1906 by the Swiss Peasants' Secretariate showed that the earnings of the farm servant (cash, board and lodging) only amounted to two-thirds of those which a trained workman obtained in industry. It is not certain that the difference between the two situations is any less to-day. On the other hand, it frequently happens that agricultural earnings are not estimated at their full value. The agricultural labourer compares them with those of industrial workers without sufficiently taking into account the difference between the living

expenses. They forget, too, the fact that often the higher wages of the urban worker are more than absorbed by the difference in the price of goods and notably by the dearness of housing accommodation.

(2) *Working Hours.* — The working hours, according to the inquiry made by the Swiss Peasants' Secretariate, amounted to 12 in 1906. They are much shorter in industry. Moreover the fixed hours of work and the Sunday rest are a new attraction for the rural worker and the introduction of the eight hours day in industry can only make them more irresistible. It is well understood that, being carried on in the open air and being more varied, agricultural labour can be continued longer than industrial labour. This, however, in no way alters the fact that the shorter working hours in industrial labour often induce the rural worker to abandon his occupation.

(3) *Recreation.* — Town life and fixed working hours are two factors which favour the inclination which men feel for recreation and amusement; they often contribute, therefore, to a change of occupation. In town, on the other hand, the labourer is less under the eye of his neighbours and enjoys much greater liberty of action than in the country, where every one knows him.

(4) *The Hope of a Lucky Chance.* — The farm servant knows what is before him if he remains in agricultural work; the most he can hope is to become one day the owner of land and this hope is still very uncertain. On the other hand, he is fascinated by the example of villagers who, having gone to the towns young and without money, have amassed large fortunes. The secret hope of benefiting by a similar lucky chance is for rural workers one of the most potent inducements to migrate and it matters little that out of 100 migrants there is perhaps only one who succeeds and that the majority of the others must remain factory hands all their lives.

(5) *The Possibility of Making a Home.* — Farm servants have much less chance of making a home than other classes of the population. A special study of the results of the Census of 1900 has shown that, of 1,000 male farm servants 829 are unmarried, while of every 1,000 men engaged in agriculture only 459 are in this condition. This situation is still worse for men between 40 and 49 years old; out of every 1,000 male labourers between these ages 656 are unmarried, while of every 1,000 men between the same ages engaged in agriculture, only 218 are not married. The unsatisfactory financial conditions of farm servants and above all the want of suitable accommodation and of land for growing potatoes and other vegetables, as well as the want of an occupation for the wife and children, render it extremely difficult for agricultural labourers to make a home. As that is the natural aim of every young man, workers prefer to change their occupation in order to realise their desire.

Other causes might also be mentioned which contribute, in a certain degree, to accelerate the migration of farm servants. We confine ourselves to noting the want of institutions providing for old age and invalidity and, in certain cases, the organization in the towns of systems for finding employment, the influence of the schools, etc.

§ 2. THE DEVELOPMENT OF SMALL HOLDINGS.

In studying the phenomenon of rural depopulation we noted that it is the peasant holding cultivated with the aid of the members of the family alone which has shown itself best able to resist the tendency to migration. One is naturally induced to place in the front rank amongst the remedies against rural depopulation the development of holdings of this kind.

In Switzerland, however, it is not a matter of breaking up large holdings in order to transform them into small ones. The apparent superiority of small holdings from the point of view of production is due to the fact that the large holdings are, in the main, mountain and pastoral farms. Of 2,664 holdings in Switzerland which are more than 70 hectares in area, there are only 595 which contain cultivated fields, and only 1,058 contain meadows. No less than 85 % of the land of the large holdings consists of pastures which are incapable, owing to the height or the configuration of the ground, of being otherwise utilized.

On the other hand, the Swiss Peasant's Secretariate is of opinion that small holdings can be created on the lands rendered susceptible of cultivation by improvements, especially in cases where the land belongs to communes or other public bodies. Unfortunately, for want of sufficient statistical data, an inquiry is necessary into the nature and the extent of the improvements carried out during the War, as well as the area of the land still capable of improvement.

On these lands, two very different types of farm could be created :

(a) In the first place, small rural properties, to be acquired by the payment of annuities, and to be allocated to peasants who are efficient, but have only small savings at their disposal, and are desirous of making themselves independent. The farmer and his wife, as well as their children, would have the certainty of making out of the land a livelihood which, though modest, would be assured. Supposing that the man worked 330 days, and that his wife, besides doing the work of the house, passed two thirds of her time on the land, we should reach a total of 570 days. The statistics collected by the Swiss Peasants' Secretariate in its researches on the production of farms indicate that small holdings require 142 days' work per hectare. A total of 550 days' work would thus correspond to an average area of 4 hectares. Acting on the same principle, one could allocate small holdings of between 1 and 2 hectares to unmarried agricultural labourers desirous of cultivating land in addition to their work.

(b) However, the holdings of which we have just spoken allow two adult persons at the most to devote their whole energies to them. When the children grew up, they would be obliged to seek elsewhere, if not the whole, at any rate part of their livelihood. Now it is very desirable that besides the parents at least one adult child, or better still, two adult child-

ren, should find on their father's land scope for their whole energies. Not only is the family life thus enabled to play the important rôle which it ought to play from the moral point of view, but the future farmer can be trained on the land itself. It is also necessary, then, to create farms capable of absorbing the energies of a whole family. If one takes account of the fact that holdings of from 10 to 15 hectares require 88 days' work per hectare and those of from 5 to 10 hectares 111 days' work per hectare, a holding with an area midway between these two classes would furnish 100 days' work per hectare, or 1,000 days' work for 10 hectares, which represents the work of three adult persons devoting themselves exclusively to the farm. It should be noted that, besides three adult persons occupied in agricultural work, we must count one person entirely occupied in the work of the house and, perhaps, several young persons. That is to say, a family holding, absorbing the work of a married couple and their adult children, should be from 8 to 12 hectares in area.

§ 3. THE DECENTRALIZATION OF THE URBAN POPULATION.

In studying the extent of the migration from rural districts, we said that the number of independent farmers had only diminished where land devoted to agriculture had been taken for building purposes in the neighbourhood of towns and industrial centres. To prevent the farmers thus dispossessed from being lost to agriculture, the Swiss Peasants' Secretariate suggests that they should be given a legal right to claim land newly made cultivable. On the other hand, as the growth of the towns diminishes the area of cultivated land, it is asked if it would not be possible to carry out an enlightened urban land policy substituting for the system of block dwellings family houses surrounded by 5 to 15 ares of land. In this question, the Swiss Peasants' Secretariate goes so far as to propose that all the employers of a commune or, at any rate, the largest among them should be obliged to help to finance colonizing undertakings of this kind, which would be considered to be public utility undertakings, or, better still, semi-official in character. The workmen concerned should also be amongst the subscribers. Lastly the State or the commune should give it, on its part, financial support. Apart from the beneficial effect which the gardening work during the time rendered available by the reduction of the working hours would have on the health of the workers, it is thought that the rural workers, seeing their industrial comrades employing their leisure in working on the land, would become more attached to such work and would be less inclined to leave the country for the town.

§ 4. CONSOLIDATION OF HOLDINGS.

Agricultural land suffers in many parts of Switzerland from excessive subdivision, an effect of the original settlement of the population in villages and the division in kind, formerly very much in vogue, whereby in each share there was the same quantity of movable property, of real property,

of rights or credits of the same nature and value. The consolidation already carried out in several regions ought to be extended to other regions. However, it is recognized that, in districts where excessive subdivision is complicated by considerable differences of level, mere consolidation would not, in itself, lead to satisfactory results.

Is it possible to go further? M. STUDLER, professor of agriculture, has gone so far as to propose that all the farmers of the same village should be formed into a permanent co-operative society with the object of bringing about a more rational distribution of holdings. To attain this object, some farmers should, with the help of the co-operative society, transfer the buildings on holdings belonging to them and situated on the borders of the commune. They would, further, be given the opportunity of acquiring and adding to the holdings in question the surrounding plots, whilst on their part they would hand over to the farmers remaining in the villages the real property which they possess therein. In the course of years, following a definite plan, one would attain a radical improvement in the distribution of property, the ultimate object of which would be the transformation of the village system into a system of isolated farms each occupied by a single tenant.

The Swiss Peasants' Secretariate sees a difficulty in the way of practically realizing this plan in the cost of constructing the numerous new buildings which it requires; moreover, to overcome it, it is proposed that very large subsidies should be granted by the Confederation, the cantons and the communes. It must be added that in many cases the plan would meet with the unanimous resistance of the interested parties. In fact the distribution of the houses in villages and in isolated farms is not due to human caprice, but responds to the needs resulting from the distribution of the sun's rays, of the water, of the wind, etc. A striking example of this adaptation to the surroundings is furnished, in Switzerland itself, by the Valley of the Sarine, studied under the direction of Professor JEAN BRUNHES by PIERRE HAUSSEN (1):

"If one only takes into account the houses and their grouping," says this author, "there can be distinguished, in the upper valley of the Sarine, three well-defined regions:

"1. In the first region (zone of the uppermost course of the rivers) the dwelling-houses are very scattered and stand at various heights from the bottom of the valley to a considerable altitude on the terraces of the north slope. They are isolated farms, with hay-barns or cattle-sheds attached to them or quite close, and situated on the flat parts which are fairly fertile and sufficiently large to allow of the formation of a farm. This is the case in the basins of Esteig, Lauenen, Gessenay and even Rougement.

"2. In the second region, the dwelling houses are united in small groups (hamlets), situated on narrow terraces, with a centre on the main road. These centres comprise almost exclusively the houses of persons

(1) BRUNHES (Jean): *La géographie humaine*, 2nd Edition. Paris, 1912. Page 160.

with private means or even those of tradesmen and manufacturers. This is what is to be seen in the zone between Château d'Oex and Montbovon.

"3. The third region, between Montbovon and Gruyères, contains houses united in villages with all their out-buildings, barns, hay-barns, and cattle-sheds. The valley, which is very broad, but is easily overflowed by the violent waters of the Sarine, explains the necessity for this arrangement.

"Various influences have fixed the sites of the houses. The north slope being more sunny, the houses rise on it to a greater height than on the south side; houses are built near springs, under the shelter of a screen of forest which protects them from avalanches and landslips, and, if possible, in the centre of the property. They are built always on the best lands, on the volcanic cones, for example, even on the south side. Hence the scattering of the farms in the valley of the Upper Sarine on the terraces of the north slope.

"In the Freiburg Valley, from La Tine to Gruyères, the case is different; the valley is narrow, the bottom of it is dangerous, the terraces are rugged and the dwelling houses are inevitably grouped in villages where all the services are concentrated. The houses of these villages, which are really small towns, are built of stone, but are often still covered with shingles, whilst the isolated buildings, which moreover are not inhabited, are entirely and only built of wood.

"The sun, however, asserts his rights and exercises all his influence. The left bank, being the more sunny, is more thickly inhabited. Everywhere, in the district of En-Haut as in that of Gruyère, one notes that the habitable spots face to the south face the sun, which is the dominant factor in the question and the same in true even of the two lines of houses which form the street of a village (1) "

This example suffices to illustrate how, in many cases, geographical exigencies stand in the way of transforming the system of village groups into that of isolated farms.

§ 5. THE BUILDING OF HOUSES FOR AGRICULTURAL LABOURERS.

It is necessary to make better provision for the building of houses for rural workers. Special inquiries, carried out by the Swiss Peasants' Secretariate, on the basis of the results of the Census of the Population taken in 1900, had shown that the proportion of agricultural labourers who were unmarried was 82.9 per cent., while it is only 45.9 per cent. for all men employed in agriculture. Between 40 and 49 years of age, the proportion of agricultural labourers who are unmarried is 65.6, whilst it falls to 21.8 for all men engaged in agriculture. The making of a home obviously meets great difficulties amongst the agricultural labourers, and

(1) A similar study, dealing with a part of the Swiss plateau has been made by Hermann WALSER: *Doerfer und Einzelhoeefe zwischen Jura und Alpen im Kanton Bern*, in *Neujahrs-Blatt der litterarischen Gesellschaft Bern auf das Jahr 1901*, 4^o, 46 pages.

these obstacles constitute an important cause of rural depopulation. Steps should, therefore, be taken to facilitate the labourers in making a home and in the first instance, with this object, to improve their housing conditions. As the agricultural employers are not in a position to supply the necessary means themselves, the building of house, for agricultural labourers ought to be aided by the communes and by the State.

The best means of building such houses would certainly be the formation of a co-operative society by the employers and the labourers of a commune where there is a scarcity of houses. The Swiss Peasants' Secretariate deems it necessary that both parties should be interested in the undertaking. By themselves, the labourers will not have sufficient means at their disposal, but none the less they ought personally to take part in the business. The co-operative method would be preferable to a communal or purely private undertaking in the communes where the inhabitants are grouped in villages. On the other hand, in the districts of isolated farms, the commune should build labourers' houses on its own account or should subsidize the building carried out by the employers. In this case, also, a semi-official form of undertaking might be contemplated.

The carrying out of such a scheme would greatly favour the maintenance of the agricultural labouring class, not only numerically, but also from the point of view of its value. The prospect of being able, in the course of time, to make a home, would render more attractive to the efficient labourers the idea of remaining in the country, while, under present conditions, they prefer the town.

We may add that, in the opinion of the Swiss Peasants' Secretariate, the question of the improvement of the housing of the agricultural labourer implies also the provision of a piece of land of 15 to 50 ares, in order that the wife and children may also employ their energies profitably by cultivating a part of the food stuffs necessary for the household and even keeping a few head of stock.

§ 6. THE IMPROVEMENT OF THE SYSTEM OF FINDING AGRICULTURAL EMPLOYMENT.

The public service of finding employment has more and more replaced, in recent years, the old methods which, in certain cases, were quite primitive. Latterly, and especially since the public labour exchanges, under the Federal Decree of 29 October 1909 concerning the encouragement by the Confederation of the service of finding employment, have been subsidized by the Confederation, the work of the labour exchanges has greatly developed. Although the 16 public labour exchanges principally serve for the finding of employment in industry or trade, it must be admitted that some of them display considerable interest in finding employment for agricultural labourers. Amongst these we may mention particularly the Fribourg Cantonal Exchange and the Central Bureau of Zurich. It appears from the report on the working of the Central Bureau of the Swiss Labour Exchanges that the exchanges procured employment in agricul-

ture for 5,146 persons in 1917. The central administration of this service has also endeavoured to enter into relations with the Swiss Peasants' Union and the Union has given its support by undertaking to publish the number of vacant places in the *Revue des marchés agricoles*, the organ of its bureau of information regarding prices. On account of the large circulation of this periodical, this largely helps to make the labour exchanges better known.

To make closer the collaboration between the labour exchanges and the Swiss Peasants' Union, the Union suggests the establishment of a central agricultural labour exchange to be added to the other institutions connected with the Union. This central exchange, with a view to increasing the supply of labour, should assume special duties, amongst which we may mention :

- (1) Finding employment in agriculture for boys and girls on leaving orphanages or who had been under other kinds of guardianship ;
- (2) Finding employment on farms for farm pupils or young men desirous of doing unpaid agricultural work during school or university vacations.
- (3) Finding paid employment in well-managed farms for the sons of farms completing their technical training.
- (4) Finding unpaid employment on farms for girls.
- (5) Finding employment for agricultural land agents.
- (6) Finding employment for migratory labourers, particularly on large farms.

The central exchange would establish branches in districts where no public labour exchange exists or where the service of finding employment would meet a need ; on the other hand, the public exchanges, in districts where they already exist, would undertake the finding of employment in agriculture.

At the moment when the Swiss Peasants' Secretariate drew up its report, there was also occasion to pass measures to restrict the emigration of agricultural labourers, for there was reason to fear an excessive emigration of such labourers to certain belligerent countries, to fill the gaps left by the War amongst the persons occupied in agriculture. We confine ourselves to noting this fear, as the rate of exchange between Switzerland and all the neighbouring countries is such that there cannot, in practice, be much inducement to agricultural labourers to go to seek outside Switzerland wages paid in currency of far less purchasing power.

§ 7. SOCIAL INSURANCE.

The rural worker does not feel the need of insurance in the same degree as the town labourer. For him and for his family, the ownership of the soil, and nature, inexhaustible source of new forces, represent the best form of insurance. However, on the small farm, when the family spirit grows weak, the beneficent rôle of social insurance becomes evident. This is notably the case for agricultural labourers when the patriarchal relations between master and workman disappear.

It cannot be disputed, then, that by the advantages which it offers to the industrial labourers, the development of social legislation stimulates migration from the rural districts. The more assured and the more pleasant life in the towns becomes, the more readily will the country population desert the land, and the peasants, or at any rate their children, be induced to change their occupation.

It would, nevertheless, be in the highest degree undesirable that the peasant population should seek to remove this obstacle by opposing the realization of social progress. Besides, to give them an interest in such progress, it is sufficient to make the independent workers (that is the farmers themselves) benefit by the insurance equally with their employees.

Of all forms of insurance, it would seem that none should be so much appreciated by the rural population as insurance against old age. They think less about illness and accident, but they know that, unless they die young, they cannot escape from old age. The certainty of finding themselves relieved from distress in their old age ought then to have a strong attraction for the rural population. But old age insurance is not all and the Swiss Peasants' Secretariate are of opinion that, with regard to other forms of social insurance, the peasant population should at least be given the possibility of voluntarily insuring themselves. The Secretariate declares, too, that care should be taken not merely to apply the terms of insurance determined by town conditions. Even in the development of social insurance it is necessary carefully to consider the quite special conditions of rural life, and it is only by doing so that insurance may be made a means of helping to arrest the migration from the country districts to the towns.

* * *

Many other means ought to be employed to attain this result, and the Swiss Peasants' Union, without dwelling upon them at length, does not lose sight of them. We may instance, for example, the development of the telegraph, of the telephone, of roads, and of co-operative credit. Everything which contributes to the betterment of the condition of the peasant helps also to arrest rural depopulation for, as long as one can gain a livelihood in agriculture, we shall find persons disposed to cultivate the land. The problem of rural depopulation being, above all, an economic problem, the most important step to be taken to prevent the desertion of the country is to carry out an economic policy which enables the peasant to earn a remunerative livelihood. It is a question, in the first place, of seeking to guarantee that the prices of agricultural produce shall be such as to assure a reasonable return to the farmer who, having organized his farm on rational lines, manages it according to progressive technical methods. The Swiss Peasants' Secretariate considers that an agricultural return would be entirely satisfactory which would enable the farmer to earn 4 per cent. interest on his capital and would ensure to every adult worker

of his family earnings equal to that of a trained industrial worker. It would perhaps be better to take into account the fact that the rate of interest on capital is at present 6 per cent., if one wishes that money should continue to be invested in the land, but one cannot fail to subscribe to the conclusion that "joined to the independence and security which agriculture assures, economic prosperity will be the most powerful attraction for the peasant population and at the same time the most effective means of preventing excessive migration from the rural districts."

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

CZECHO-SLOVAKIA.

SMALL AND LARGE HOLDINGS IN BOHEMIA, MORAVIA AND SILESIA. — MANUEL STATISTIQUE DE LA RÉPUBLIQUE TCHÉCOSLOVAQUE Prague, 1920.

The State Office of Statistics in the course of its researches as to the land sown in 1919, endeavoured to fix the number of agricultural holdings at the present time in Bohemia, Moravia and Silesia, dividing them according to whether their area was above or below three hectares. The following results were attained :

Country	Number of holdings		Total
	Of 3 hectares or less	Of more than 3 hectares	
Bohemia	566,778	186,550	753,328
Moravia	361,951	88,087	450,038
Silesia	42,576	13,245	55,821
Total	971,305	288,782	1,260,087

These statistics are not quite complete. On the one hand, indeed, the small holdings of 10 ares and less do not appear, and on the other, there are no data for the towns of Prague and Liberec (Bohemia), Znojmo and Olomouc (Moravia), and for that part of the territory of Teschen (Silesia) occupied by Poles. It may be added that the number of cultivators is much smaller, the same person having been counted in every commune where he occupies land.

If now we consider the total area of farms of both categories we find the following figures :

Countries	Farms of three hectares or less		Farms of more than three hectares		Total number of farms
	Number	Percentage of arable land	Number	Percentage of arable land	
Bohemia . . .	580,073	23.5	1,890,405	76.5	2,470,478
Moravia . . .	340,585	29.6	810,774	70.4	1,151,359
Silesia . . .	42,805	25.2	126,979	74.8	169,784
Total . . .	963,463	25.4	2,828,158	74.6	3,791,621

The total number of farms comprised in this last table exceeds the preceding because it includes farms of 10 ares and less. It only shows the more forcibly the predominance of farms of more than three hectares.

FRANCE.

1. THE OFFICIAL SYSTEM OF FINDING EMPLOYMENT FOR AGRICULTURAL LABOURERS — Circulaire du Ministre de l'Agriculture aux présidents des offices agricoles départementaux en date du 13 septembre 1920. — Note du Chef de service de la main-d'oeuvre agricole en date du 30 septembre 1920.

In the course of the war, a Service of Agricultural Labour was formed at the Ministry of Agriculture, but this Service could not hope to solve by itself the whole of the questions relating to labour; it was necessary rather to seek their solution by taking into account the conditions of every agricultural region. This was the idea of Parliament when, by the Law of 25 October 1919 (Art. 49) it provided for the conversion of this service into an autonomous office. At present the service is dependent on the Ministry of Agriculture, and comprises besides the Central Service :

(1) Departmental bureaux appointed by agricultural associations. These have been established in the following departments: Ain, Aube, Aude, Basses-Alpes, Hautes-Alpes, Aveyron, Cantal, Cher, Corsica, Eure-et-Loir, Haute-Garonne, Gers, Isère, Loir-et-Cher, Loire, Haute-Loire, Lot, Manche, Morbihan, Nièvre, Oise, Paris, Haut-Rhin, Saône-et-Loire, Haute-Savoie, Savoie, Vaucluse, Vienne.

Several of these are not working efficiently, and will have to be reorganized.

(2) Immigration bureaux on the frontiers, appointed by decrees issued by the Ministries of Agriculture, of Labour and of the Interior on 5 August 1919 and 25 October 1919. They ensure the supervision of

foreign agricultural labourers, or proceed to recruit them for private persons or bodies, among which may be counted the departmental bureaux. They are thus distributed :

Belgian immigration : Turcoing, Feignies (Nord).

Polish immigration : Toul or Metz (to be established).

Czecho-Slovak immigration : Toul or Metz (to be established).

Italian immigration : Modane (Savoy), Mentone (Alpes-Maritimes).

Spanish immigration : Perpignan (Pyrénées-Orientales), Marignac-Saint-Béat (about to be established), Hendaye (Basses-Pyrénées).

Portuguese immigration : Hendaye (Basses Pyrénées), and eventually Bordeaux or Pauillac.

We may point out that the immigration of Belgians, Spanish and Portuguese is not subject to any special legislation ; on the contrary Polish and Italian emigration is regulated by conventions concluded between the government of France and the governments of Poland and Italy. The result is that if French employers desire to procure workmen of these last nationalities they must have recourse to official contracts, the models of which are supplied by the Service of Agricultural Labour.

The Central Service is a means of co-ordination between the departmental bureaux and the immigration offices, and also a centre of inquiry for all questions of a technical and social nature aiming at recruiting agricultural labourers, bettering their condition, and carrying out the labour laws.

With regard more especially to immigration, this service is empowered by international conventions to enter into direct relations with foreign governments in the name of the French government. Within its province are also the establishment and control of " centres of agricultural apprenticeship " situated on lands which are in private ownership, in accordance with a Decree of 23 October 1919. These centres, which are not teaching institutions, are intended to form good agricultural labourers.

Lastly, it has also a special section for propaganda and information for agriculturists mutilated in the war.

However great are the results already attained by this organization, it will only be able to perform all the services expected of it by a greater decentralization, that is, when a bureau of agricultural labour has been opened in every department. The establishment and organization of these bureaux are the subject of the Ministerial Circular of 13 September 1920, and of the Note of the Chief of the Service of Agricultural Labour, dated 30 September 1920. From these documents it is evident that the departmental bureaux ought to set before themselves a double object :

(1) To seek out farm labourers and to find work for them.

(2) To improve the conditions of life of the labouring peasant.

As to the first point, the bureaux have to consider :

(a) The finding of employment for those of both sexes who are out of work and seek their aid.

For this purpose they receive the applications of labourers and the offers of agriculturists, and facilitate an understanding between them.

(b) To find occupation for discharged and mutilated soldiers fitted for agricultural labour as well as to co-ordinate the work of the training schools and of associations in the department, formed to assist this class of worker.

(c) To find places for farmers, metayers, managers and foremen.

(d) To seek out seasonal labourers.

The departmental bureaux being in constant relations with one another through the Central Service, an interchange between departments may be contemplated, by which labourers may be passed from one district to another according as agricultural work is advanced or backward.

(e) To distribute occasional military labour. Departmental bureaux may, indeed, enter into a communication with the local military authorities to regulate the conditions of employment of the gangs of men sometimes placed at the disposal of the farmers by the War Minister.

(f) The employment of boys in agriculture during the school holidays.

(g) To seek out among the model farms of the district those specially adapted to the installation of centres of apprenticeship; to organize these centres, to recruit apprentices and to find posts for them on their leaving these establishments.

(h) To call for foreign labour and establish constant relations with the immigration offices.

(i) To diffuse information among employers, as to the treatment of immigrants according to their nationality, regarding their customs and their preferences about food, lodging, etc., and to give all necessary explanation relating to the legal and administrative formalities required for their employment in France.

As regards the call for foreign labour, offers are generally requested by the Central Service. Afterwards the available contingents are notified to the departmental bureaux. Each of these communicates all the needful information and conditions to the farmers of the department. Those among them who require labour draw up their proposals according to formula placed at their disposal. This done, the bureaux arrange the offers of the department, examine them, correct them if necessary, and address them to the Central Service, which centralizes them, and passes on the offers of employment, fixes the cost of hiring and travelling expenses, sets to work its agents or correspondents in foreign countries, and takes all the necessary measures to ensure the coming of the labourers, who go to the immigration offices for information as to the localities where they are required.

Employers must supply the departmental bureau with the necessary funds for cost of hiring and travelling expenses, the amount to be fixed by the departmental bureau. We may add that on receiving the application of agriculturists for foreign labourers, the departmental bureaux may require in addition to this amount a deposit equal, for instance, to 10 per cent. of the amount of the estimated cost of hiring and travelling expenses. The provident fund thus formed will ensure a reserve for paying compensation,

if required, to those employers who may suffer loss through the breaking of an engagement for which they are not responsible.

Regarding the betterment of of peasant life, the departmental bureaux will institute detailed enquiries, open competitions, distribute pamphlets and descriptions of farms where labour questions have been particularly well solved, and supply specifications and plans of buildings, etc. Their attention will be specially turned to questions connected with wages, and their determination in money and in kind, to the awarding of premiums for production and for economies in net cost, allowances for family expenses and for long service, etc. In a word, they will inquire into all the forms of remuneration likely to contribute to an improvement in the life of the agricultural labourer and to a better output. They will also turn their attention to all reforms, great or small, which in lodging, sleeping accommodation and food, or in the methods of cultivation and instruments of labour, are of a nature, directly or indirectly, to add to the comfort of agricultural labourers or to diminish their fatigue. Lastly, they will seek to give wide publicity to every measure taken with a view to diminishing unemployment, to encouraging insurance against illness, accidents, and old age, to organizing the acquisition of small holdings, etc.

The objects to be attained by the departmental bureaux in connection with the immigration offices and the Central Service are therefore very varied. They cannot be accomplished by isolated action on the part of the bureaux. Therefore the Minister of Agriculture requests them to collaborate with existing trade associations, and to ensure that all may work harmoniously together. In this way they will tend to become a centre of action for the solution of the questions arising out of the agricultural labour crisis.

* * *

2. MEASURES TAKEN TO PREVENT THE RISE IN PRICES. — DÉCRET DU 16 OCTOBRE 1920 CRÉANT DES CONSEILS DÉPARTEMENTAUX DE CONSOMMATEURS ET UN CONSEIL SUPÉRIEUR À PARIS.

A Decree dated 16 October 1920 establishes under the presidency of the Prefect a "Consumers' Council" (*Conseil de Consommateurs*) in each department. This council consists of: the prefect (chairman), two members nominated by the General Council, a member nominated by the Municipal Council of the chief town of the department, a member of the Chamber of Commerce of the chief town of the department, two representatives of the distributive co-operative societies, and eight representatives of the consumers chosen from among the members of associations of consumers, of large families, of ex-soldiers, etc.

Further, the prefect can establish, if he considers it advisable, in the districts, or in some of the districts of his department, sub-committees presided over by the sub-prefect, which shall make inquiries and collect information useful to the Departmental Council.

The members of these Councils are nominated by a decree of the prefect.

The Consumers' Councils must enquire into the causes of the increase in prices of food stuffs and must propose measures to be taken to prevent such increase and to improve the means of feeding the nation. They are to call attention to alterations in the regulations of fairs and markets which would tend to improve conditions and to inform the proper authorities of abuses and illegal acts. Finally they are to study all questions which the departmental administration requests them to enquire into.

A Consumers' Superior Council is established at Paris, which is to be consulted on all points bearing on the feeding of the nation, specially on the wishes and conclusions of the Departmental Councils. It is presided over by the Under Secretary of State for Supplies, who nominates the members, and is composed of two Senators, two Deputies, a member of the Paris Municipal Council, a member of the General Council of the Department of the Seine, the prefect of the Department of the Seine or his delegate, the prefect of police or his delegate, the Director of Supplies, three members nominated by the Chamber of Commerce of Paris representing trade in and production of food, two representatives of distributive co-operative societies, ten members representing the consumers, chosen from among associations of consumers, of large families, of ex-soldiers, etc.

ALGERIA.

THE SOCIAL CONDITION OF AGRICULTURAL LABOURERS. — From a communication made by the Algerian Government to the International Institute of Agriculture.

In Algeria agricultural labour is almost exclusively carried on by the Mussulman natives (Kabyles, Arabs, Moroccans) under the direction of Europeans, amongst whom the Spaniards predominate in Orania.

The natives have few wants and do not seek to improve their condition. They are fatalists and endure every thing with indifference.

To the department of Oran Moroccans come in great numbers to work during the harvest and the vintage season. They earn from 12 to 15 francs per day at piece-work.

In the other departments the natives work by the year as Khammès (from the word Khamse which in Arabic means 5) receiving as remuneration one-fifth of the crop. More frequently they are day labourers, receiving from 6 to 8 francs per day.

Wages have increased, but the increase has contributed but little to the improvement of the condition of the agricultural labourer, on account of the increase in the cost of living.

The European labourer who speaks Arabic and has a knowledge of the crops of North Africa soon rises to be foreman, and later establishes himself on his own account on a gratuitous concession of land, or a colonization lot bought by auction. Various methods have been suggested

for improving the condition of agriculturists. The Agricultural Bureaux of the Prefectures assist agricultural labourers in finding employment.

The law respecting old age pensions for workmen and peasants is not in force in Algeria; it would not be easy to administer it among the natives because of the instability of much of the labour.

For the same reason it would be useless to consider profit-sharing; most of the native workmen frequently change their employers or return to their douar at the end of the harvest or of the vintage.

The extension of technical instruction is an excellent method of raising the condition of the agricultural labourer. A beginning has already been made by attaching elementary workshops to some of the schools, principally in the Kabyle territory. It would be advisable also to study the improvement of the houses, which in the country districts are usually unsanitary and comfortless. Labourers suitably lodged would probably settle on the land.

FRENCH COLONIES.

LABOUR CRISIS ON THE IVORY COAST — *Bulletin de renseignements sur la situation économique et politique de l'Afrique occidentale française* Gorée, August, 1920.

The great lack of labour which hampers the whole of French West Africa has specially unfortunate results in this Colony, where several stations have had to be closed down, and where the natives of the forests display a tendency to desert the villages and the cultivable land which the administration had assigned to them in order to reclaim them from the degraded existence which they led in the bush.

The administration is making great efforts to guard against the consequences of this return to savage life and is encouraging intensive cultivation which, by tying the natives to the soil and insuring them regular food, will diminish the physical misery from which the race suffers and consolidate a family and social life which as yet hardly exists.

FRENCH PROTECTORATE OF MOROCCO.

RURAL ARTS IN MOROCCO. — DARDENNE (Jean): *Le réveil des métiers d'art indigènes au Maroc*, in *Colomes et Marne*. Paris, October, 1920.

The rural art of Morocco is rather rough yet highly interesting. It is perfectly suited to the simple habits of the tribes and is not easily to be distinguished from a trade, except that it is carried on in the homes of the people, and because of this it preserves its individual characteristics, remains true to type and does not degenerate into the commonplace product of a workshop.

After the harvest is got in the women of the nomad tribes weave grey and black materials out of goat and camel hair (*flax*), which when joined together form the tent; they also make rush mats to cover the

floor of the tent. Rushes and the wool of animals are also used for making travelling bags, baskets, hand bags, etc. Pottery is only represented by a few rough cooking pots. In short these are very primitive industries. If we wish to find household utensils which display any artistic effort we must go to the sedentary, or semi-sedentary, tribes.

Beside the weaving of tent cloths, for example, we find much finer material for clothes being woven (the black burnouses of the Glaoua, ornamented in the back with a large red oval, etc.), also materials for blankets and cushions; these stuffs are usually ornamented with geometrical designs, some of which have magic meanings (different renderings of the hand as a charm against the evil eye; stars and crosses, which are, seemingly, only diagrammatic representations of the five or ten fingers). The chief of these home industries, the one which deserves most attention is carpet making: small tufts of dyed wools are knotted closely together on to a firm foundation producing the effect of a thick, tawny-coloured fleece, sometimes decorated with bright coloured splashes.

Pottery, also, is no longer rudimentary, without however losing the characteristics of primitive art. The shapes are diversified and graceful; amphorae, bowls, couscous dishes, stoves, oil lamps, candle-sticks, powder horns, etc.; they are decorated with geometrical patterns (squares, triangles, diamonds, saw-edges, chequers, etc.) usually in black on a red ground.

Finally let us notice their wood-work (boxes and butts of guns from Sous) and silver work: the trinkets of the Ksours of the Sahara, very rough work, closely related to what is expressively described as negro art; Berber trinkets of comparatively advanced technique (rings, bracelets, anklets, forehead ornaments, etc.), which are decorated in the same way as the stuffs.

All these objects are somewhat barbaric, but they are attractive owing to their vigorous characteristics, their solidity, and by the happy combination of attractiveness and utility which they display (1).

Moroccan art had been in a decadent condition since the beginning of the 19th century. The administration of the protectorate took up the question and in 1916 a special section of native art was added to the Service of Fine Arts of the Resident's Administration. In the beginning of 1918 this special section was developed, acquiring a certain degree of autonomy and becoming the Bureau of Native Art Industries. In the beginning of 1920 it was attached to the Education Department.

Prudence was the first rule of this institution. Innovation was not its object. It would have been absurd under the pretext of regeneration to attempt to rejuvenate and modernize Moroccan art; what was needed was merely to rediscover the fine traditions, to bring them again

(1) For further details see: BEL (A.), *Les Industries de la ceramique de Fez*, Paris, Alger, 1918; RICARD (P.), *Les Arts et Industries indigènes du Nord de l'Afrique, Arts ruraux*, Fez, 1918; *Arts marocains, broderie*, Alger, 1918, and the *France-Maroc* (specially for January, March, July, August, October, and November 1918, January and March 1919).

into use and to inspire the artisans with habits of artistic uprightness. On the one hand the whole country was searched for any specimens of artistic work of the best periods which still existed, this collection being formed into a museum of models which would increase year by year; on the other hand the activity of the old artisans, who knew the secrets of the old technique, was stimulated by monetary prizes or orders. Without establishing professional schools of Moroccan art, efforts have been made to multiply workshops where master-workmen and work women teach apprentices of all ages, who remain within the ancient corporations. The Bureau of Native Arts supplies them with models, keeps them informed of technical details and procures for them raw materials which they may lack (more especially dyes for wool-stuffs). It has, further, undertaken to organize the sale of the goods which are produced. It has established official shops in the principal towns of Morocco, which also serve as a sort of permanent exhibition of native arts; it has organized special exhibitions in Morocco and in France; by means of publications it has drawn public attention to the artistic industries of Morocco; by means of an official guarantee mark it safeguards purchasers against trashy imitations. It has, in short, become an intermediary between producers and buyers.

There is still much to be done; the edifice is not yet firmly based and it is to be feared that a little too much haste, too great a demand, or too intense a production may endanger its stability; as yet all the interesting trades have not been gathered into this movement and those which are already working still need great care; vegetable dyes have not yet quite ousted artificial dyes, and the carpets which the women make at home sometimes display slovenly work, poor designs and displeasing mixtures of colour; in pottery, as in weaving, embroidery, wood and metal work, etc., it would be desirable to give the apprentices methodical instruction in design and decorative composition. This would be a very big undertaking, but the results already obtained give good grounds for hope.

PORTUGAL.

MEASURES FOR THE INTENSIFICATION OF AGRICULTURE. — *Diário do Governo* Lisbon, 6 September 1920. *Diário de Notícias*, Lisbon, 15 September 1920.

On the basis of the Law No. 1,009 of 17 August 1920 by which the Government was authorized to adopt from 31 January 1921 measures for alleviating the present economic crisis in Portugal, two decrees have been issued with a view to increasing agricultural production. Of these the first related to the offering of prizes to agriculturists for production, and the second awards grants to farmers, syndicates, co-operative societies, and societies or undertakings for mechanical cultivation, so that the purchase of agricultural machines may be facilitated.

The prizes offered by the first decree are as follow:

(1) Premiums of 15 milreis for every hectare of land duly ploughed and sown with corn, millet, rye, chick peas, rice, beans, and potatoes, to

all proprietors or tenants, who, from 1920, for five consecutive years subject waste land to such cultivation.

(2) Premiums of 30 milreis for every hectare of land sown with the above mentioned crops, to all proprietors or tenants who bring under cultivation wooded or sandy ground.

(3) Premiums of five scudos for every hectare in excess of the extent sown in the preceding year, to all proprietors of vineyards who for five consecutive years shall subject these lands to cultivation of the kind above mentioned.

Proprietors or tenants desiring to compete for these premiums must send each year to the Physiographical Branch of the Ministry of Agriculture, before ploughing up the land they intend to cultivate and after the same land has been sown, a report showing that the land is in the condition prescribed by the decree, describing the situation of the land, giving approximately its extent, and the precise quantity of the seed to be sown, or already sown.

The premiums will be paid to each proprietor or tenant by the Treasury of the Finance Ministry after the necessary verifications have been made.

The amount of the premium may also be advanced by the Ministry of Agriculture, with such guarantee as will ensure that the State shall not suffer loss. The guarantee may be given by means of sureties when the personal liability of the receiver of the premium is not considered sufficient.

Should the receiver of the premium not cultivate the land in the prescribed manner he must return the premium, and he will incur a fine varying from twice to three times the amount of the premium.

The decree, still with the object of intensifying cultivation, imposes a special fine on such proprietors or tenants of uncultivated or sandy ground from which raw material required in agriculture or manufactures is not habitually extracted, if they leave such land uncultivated for five consecutive years. When this period has expired, if the proprietor have not provided for its cultivation the decree authorizes the expropriation of the land, which will be done in the interest of public utility by the Committee of the Agricultural Encouragement Fund, which for this purpose, will possess all the rights and advantages granted to the State by the existing legislation. The expropriation price will be calculated at ten times the total sum at which these lands are valued in the land registers.

Sandy or uncultivated lands, entered without any indication of their value in the land registers, or omitted from them, if they remain in the state of uncultivated fields or forests, will become the property and pass under the administration of the Committee of the Agricultural Encouragement Fund, without giving a right to any indemnity.

Another privilege granted by the decree in question is exoneration from the registration tax on the purchase of sandy and uncultivated lands, if the purchaser declare in writing that he has purchased the land in order to plough and cultivate it within a period of three years. He must also, at the end of the first year, show that he has ploughed and cultivated

at least one-third of the purchased land, two-thirds at the end of the second, and the whole at the end of a third year.

The purchase and sale of rural property will also be exempt from registration tax if it is to be divided, let, or sold in lots in order to form agricultural settlements, whether the purchases be made by private individuals or by collective bodies, observing the above-mentioned formalities.

The object of the second decree is to promote cultivation by machinery, to supply the increasing want of agricultural labourers and the scarcity of draught animals, aiming also at the institution of new syndicates, and new enterprises of mechanical cultivation. Applications for grants, supported by the documents required by the law, should be sent to the Agricultural Machinery Experiment Station, which, in its turn, after due verification, will send them with its own report to the Director General of Agricultural Services.

The amount of the grant is at the rate of 50 per cent. of the total cost, and of the payments necessary to obtain the machinery specified in the application. Half of the grant must be repaid to the Ministry of Agriculture in five equal yearly instalments, and the other half will remain in possession of the agriculturists or societies. Those receiving the grant are obliged: to pay the instalments fixed by law; to make trial of the agricultural machinery for the purchase of which they have asked for the grant; to break up, plough and sow a fixed number of hectares for every motor machine, and to give an account periodically of the work done.

The receiver of a grant who does not fulfil these conditions must restore the full amount of the grant unless he can show that his failure is due to circumstances over which he has no control. In this case, as in the case of failure to pay any of the instalments, repayment will be compulsory, as a debt to the Finances of the State, the receiver of the grant losing all right to the purchased machinery until he has paid the whole debt. When the number of agricultural motors purchased by a syndicate, a co-operative society, a company, or any enterprise for mechanical cultivation, exceeds four, the Ministry of Agriculture will make a grant of 50 per cent. of the cost of establishing a workshop for repairing agricultural machines. This grant must be repaid in full in ten equal yearly instalments. To these workshops workmen may be admitted as improvers, that they may learn to handle agricultural machines.

The decree also provides for the exemption of agricultural appliances from import duties.

For the precise application of the provisions of the decree itself the necessary regulations will be issued.

INTERNATIONAL INSTITUTE OF AGRICULTURE

BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, it necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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EXPLANATORY NOTE

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1. *The present Table of Contents refers to the numbers of the International Review of Agricultural Economics published from January to December 1920 and includes, therefore, all the articles and notes dealing with co-operation, association, insurance and thrift, credit and agricultural economy in general contained in these volumes.*

2. *The articles and notes relating to each part have been grouped into classes of which a list will be found preceding the Index. The classification embraces all the subjects which are included in the programme of the Review. It will be evident, therefore, that certain classes of subject which are only occasionally dealt with may not be represented in the Index of any particular year. In our classification we have followed the rule of single entry and placed under only one heading those articles and notes which, from the nature of the subject treated, might appear in more than one group.*

As it is not in every case clear why an article or note has been assigned to one group rather than to another, the reader must be prepared to refer to the several analogous groups in any of which a particular article or note might appear. A dairymen's co-operative society, for example, might have as its object the protection of the general economic interest of dairy farmers as a class, or simply the improvement of the methods of production, transport, and sale, or again the purchase and collective use of animals of the special dairy type. An article relating to such a society might appear under various headings, according as it dealt more particularly with one or other of these objects.

3. *In each group the articles and notes have been subdivided by countries following the alphabetical order. For each country the articles are arranged in the chronological order in which they were published. We have added a table giving the classification by countries.*

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